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variety of uses well known in the art and decribed further below. For instance, SEQ ID NO:X has uses including, but not limited to, in designing nucleic acid hybridization probes that will detect nucleic acid sequences contained in SEQ ID NO:X or the related cDNA clone contained in a library deposited with the ATCC. These probes will also hybridize to nucleic acid molecules in biological samples, thereby enabling immediate applications in chromosome mapping, linkage analysis, tissue identification and/or typing, and a variety of forensic and diagnostic methods of the invention. Similarly, polypeptides identified from SEQ ID NO:Y have uses that include, but are not limited to, generating antibodies which bind specifically to the prostate cancer antigen polypeptides, or fragments thereof, and/or to the prostate cancer antigen polypeptides encoded by the cDNA clones identified in Table 1.

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Nevertheless. DNA sequences generated by sequencing reactions can contain sequencing errors. The errors exist as misidentified nucleotides, or as insertions or deletions of nucleotides in the generated DNA sequence. The erroneously inserted or deleted nucleotides cause frame shifts in the reading frames of the predicted amino acid sequence. In these cases, the predicted amino acid sequence diverges from the actual amino acid sequence, even though the generated DNA sequence may be greater than 99.9% identical to the actual DNA sequence (for example, one base insertion or deletion in an open reading frame of over 1000 bases).

Accordingly, for those applications requiring precision in the nucleotide sequence or the amino acid sequence, the present invention provides not only the generated nucleotide sequence identified as SEQ ID NO:X, the predicted translated amino acid sequence identified as SEQ ID NO:Y, but also a sample of plasmid DNA containing the related cDNA clone (deposited with the ATCC, as set forth in Table 1). The nucleotide sequence of each deposited clone can readily be determined by sequencing the deposited clone in accordance with known methods. Further, techniques known in the art can be used to verify the nucleotide sequences of SEQ ID NO:X.

The predicted amino acid sequence can then be verified from such deposits. Moreover, the amino acid sequence of the protein encoded by a particular clone can also be directly determined by peptide sequencing or by expressing the protein in a suitable host cell containing the deposited human cDNA, collecting the protein, and determining its sequence.

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The present invention also relates to vectors or plasmids which include such DNA sequences, as well as the use of the DNA sequences. The material deposited with the ATCC on:

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ATCC Deposits	Deposit	ATCC Designation Number
	Date	
LP01, LP02, LP03, LP04,	May-20-97	209059, 209060, 209061, 209062, 209063,
LP05. LP06, LP07, LP08,		209064, 209065, 209066, 209067, 209068,
LP09, LP10, LP11,		209069
LP12	Jan-12-98	209579
LP13	Jan-12-98	209578
LP14	Jul-16-98	203067
LP15	Jul-16-98	203068
LP16	Feb-1-99	203609
LP17	Feb-1-99	203610
LP20	Nov-17-98	203485
LP21	Jun-18-99	PTA-252
LP22	Jun-18-99	PTA-253
LP23	Dec-22-99	PTA-1081

each is a mixture of cDNA clones derived from a variety of human tissue and cloned in either a plasmid vector or a phage vector, as shown in Table 5. These deposits are referred to as "the deposits" herein. The tissues from which the clones were derived are listed in Table 5, and the vector in which the cDNA is contained is also indicated in Table 5. The deposited material includes the cDNA clones which were partially sequenced and are related to the SEQ ID NO:X described in Table 1 (column 9). Thus, a clone which is isolatable from the ATCC Deposits by use of a sequence listed as SEQ ID NO:X may include the entire coding region of a human gene or in other cases such clone may include a substantial portion of the coding region of a human gene. Although the sequence listing lists only a portion of the DNA sequence in a clone included in the ATCC Deposits, it is well within the ability of one

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ATCC Deposits by use of a sequence (or portion thereof) listed in Table 1 by procedures hereinafter further described, and others apparent to those skilled in the art.

Also provided in Table 5 is the name of the vector which contains the cDNA clone. Each vector is routinely used in the art. The following additional information is provided for convenience.

Vectors Lambda Zap (U.S. Patent Nos. 5,128,256 and 5,286,636), Uni-Zap XR (U.S. Patent Nos. 5,128, 256 and 5,286,636), Zap Express (U.S. Patent Nos. 5,128,256 and 5,286,636), pBluescript (pBS) (Short, J. M. et al., *Nucleic Acids Res. 16:*7583-7600 (1988); Alting-Mees, M. A. and Short, J. M., *Nucleic Acids Res. 17:*9494 (1989)) and pBK (Alting-Mees, M. A. et al., *Strategies 5:*58-61 (1992)) are commercially available from Stratagene Cloning Systems, Inc., 11011 N. Torrey Pines Road, La Jolla, CA, 92037. pBS contains an ampicillin resistance gene and pBK contains a neomycin resistance gene. Phagemid pBS may be excised from the Lambda Zap and Uni-Zap XR vectors, and phagemid pBK may be excised from the Zap Express vector. Both phagemids may be transformed into *E. coli* strain XL-1 Blue, also available from Stratagene.

Vectors pSport1, pCMVSport 1.0, pCMVSport 2.0 and pCMVSport 3.0, were obtained from Life Technologies, Inc., P. O. Box 6009, Gaithersburg, MD 20897. All Sport vectors contain an ampicillin resistance gene and may be transformed into *E. coli* strain DH10B, also available from Life Technologies. See, for instance, Gruber, C. E., et al., *Focus* 15:59 (1993). Vector lafmid BA (Bento Soares, Columbia University, New York, NY) contains an ampicillin resistance gene and can be transformed into *E. coli* strain XL-1 Blue. Vector pCR®2.1, which is available from Invitrogen, 1600 Faraday Avenue, Carlsbad, CA 92008, contains an ampicillin resistance gene and may be transformed into *E. coli* strain DH10B, available from Life Technologies. See, for instance, Clark, J. M., *Nuc. Acids Res.* 16:9677-9686 (1988) and Mead, D. et al., Bio/Technology 9: (1991).

The present invention also relates to the genes corresponding to SEQ ID NO:X, SEQ ID NO:Y, and/or the cDNA contained in a deposited cDNA clone. The corresponding gene can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include, but are not limited to, preparing probes or primers from the disclosed sequence and identifying or amplifying the corresponding gene from appropriate sources of genomic material.

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Also provided in the present invention are allelic variants, orthologs, and/or species homologs. Procedures known in the art can be used to obtain full-length genes, allelic variants, splice variants, full-length coding portions, orthologs, and/or species homologs of genes corresponding to SEQ ID NO:X, SEQ ID NO:Y, and/or the cDNA contained in the related cDNA clone in the deposit, using information from the sequences disclosed herein or the clones deposited with the ATCC. For example, allelic variants and/or species homologs may be isolated and identified by making suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source for allelic variants and/or the desired homologue.

The present invention provides a polynucleotide comprising, or alternatively consisting of, the nucleic acid sequence of SEQ ID NO:X, and/or the related cDNA clone (See, e.g., columns 1 and 9 of Table 1). The present invention also provides a polypeptide comprising, or alternatively, consisting of, the polypeptide sequence of SEQ ID NO:Y, a polypeptide encoded by SEQ ID NO:X, and/or a polypeptide encoded by the cDNA in the related cDNA clone contained in a deposited library. Polynucleotides encoding a polypeptide comprising, or alternatively consisting of, the polypeptide sequence of SEQ ID NO:Y, a polypeptide encoded by SEQ ID NO:X, and/or a polypeptide encoded by the the dDNA in the related cDNA clone contained in a deposited library, are also encompassed by the invention. The present invention further encompasses a polynucleotide comprising, or alternatively consisting of, the complement of the nucleic acid sequence of SEQ ID NO:X, and/or the complement of the coding strand of the related cDNA clone contained in a deposited library.

Many polynucleotide sequences, such as EST sequences, are publicly available and accessible through sequence databases and may have been publicly available prior to conception of the present invention. Preferably, such related polynucleotides are specifically excluded from the scope of the present invention. To list every related sequence would unduly burden the disclosure of this application. Accordingly, for each "Contig Id" listed in the first column of Table 3, preferably excluded are one or more polynucleotides comprising a nucleotide sequence described in the second column of Table 3 by the general formula of a-b, each of which are uniquely defined for the SEQ ID NO:X corresponding to that Contig Id in Table 1. Additionally, specific embodiments are directed to polynucleotide sequences excluding at least one, two, three, four, five, ten, or more of the specific polynucleotide sequences referenced by the Genbank Accession No. for each Contig Id which may be

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included in column 3 of Table 3. In no way is this listing meant to encompass all of the sequences which may be excluded by the general formula, it is just a representative example.

Table 3.

Sequence/	General formula	Genbank Accession No.
Contig ID		
574130	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	703 of SEQ ID NO:1, b is an integer of 15 to 717.	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:1, and	
L	where b is greater than or equal to a + 14.	
637706	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1611 of SEQ ID NO:2, b is an integer of 15 to	
	1625, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:2, and where b is greater than or equal to a +	
	14.	
638162	•	R78923, R79022, H78714, H78 72 6,
}	, , , -	H79487, H79500, H86682, H99479,
		N22197, N28292, N48317. N49043.
		N79526, W16679, AA017524,
		AA017582, AA215755, AA463914
	2435, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:3, and where b is greater than or equal to a +	·
	14.	
684310		R00703, R79938, R80028, N75501,
		N99910, W2 5289
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	972 of SEQ ID NO:4. b is an integer of 15 to 986,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:4, and	
731016	where b is greater than or equal to a + 14.	
/31016	Preferably excluded from the present invention are one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	356 of SEQ ID NO:5, b is an integer of 15 to 370,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:5, and	
	where b is greater than or equal to a + 14.	
827771	Preferably excluded from the present invention are	
02///1	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
Ì	formula of a-b, where a is any integer between 1 to	
	497 of SEQ ID NO:6, b is an integer of 15 to 511,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:6, and	
	where b is greater than or equal to a + 14.	
828193	Preferably excluded from the present invention are	
020173	one or more polynucleotides comprising a	
	one of more polynacicolaes comprising a	

828194 828199	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 704 of SEQ ID NO:7, b is an integer of 15 to 718, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:7, and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 431 of SEQ ID NO:8, b is an integer of 15 to 445, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:8, and where b is greater than or equal to a + 14. Preferably excluded from the present invention are	
	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 744 of SEQ ID NO:9, b is an integer of 15 to 758, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:9, and where b is greater than or equal to a + 14.	
828221	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 3050 of SEQ ID NO:10, b is an integer of 15 to 3064, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:10, and where b is greater than or equal to a + 14.	T47410. T54389, T54694, T47411, T54281. T54610, T58617, T58667, T78082. T78249. T80561, R28515, R28663, R38862, R54617, R54880, H08112. H08113, H16261, H16460, H22343. H22344. H29551, H29643, H41933, H41980, R83220, R83221, R85675, R89016, R89017, R99602, R99707. H58947. H58994, H59578, H59579, H62419, H91312, H91409, N54589. N66610, N73945, N76670, W03705, W04654, W31578, W38370, W39449. W93512, W93513. AA024819, AA024925. AA033860, AA076628, AA159000, AA193455, AA257006, AA252771, AA527181, AA534997, AA541666, AA614359, AA614596, AA622977, AA622978, AA569985, AA576092, AA659398, AA864814, AA904006, AA911931, AA916611, AA932076, AA991541, C06189
828235	Preferably excluded from the present invention are	AA045157, AA252563, AA573229, AA935280
828236	Preferably excluded from the present invention are one or more polynucleotides comprising a	

	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	1413 of SEQ ID NO:12, b is an integer of 15 to	
	1427, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:12, and where b is greater than or equal to a +	
	14.	
828237	Preferably excluded from the present invention are	
020237	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	3534 of SEQ ID NO:13, b is an integer of 15 to	
	3548, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:13, and where b is greater than or equal to a +	
	14.	
828239	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	452 of SEQ ID NO:14, b is an integer of 15 to 466.	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:14, and	
	where b is greater than or equal to $a + 14$.	
828242	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	850 of SEQ ID NO:15, b is an integer of 15 to 864,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:15, and	
	where b is greater than or equal to a + 14.	
828247	Preferably excluded from the present invention are	
020247	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2791 of SEQ ID NO:16, b is an integer of 15 to	
	2805, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:16, and where b is greater than or equal to a +	
020240	114.	T(/275 D11777 1110000 1110000
828248		T66275, R11733, H10020, H10293,
		AA054067, AA127524, AA192628
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	696 of SEQ ID NO:17, b is an integer of 15 to 710,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:17, and	
	where b is greater than or equal to a + 14.	
828250	Preferably excluded from the present invention are	T52330, T52406, H58954, H59892,
		H80117, H95961, AA035013,
	,	AA233062, AA811863. AA812014,
		AA827886
	978 of SEQ ID NO:18, b is an integer of 15 to 992,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:18, and	
	where b is greater than or equal to a + 14.	
	minero o la grouter man di equal to a + 14.	

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828256	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1781 of SEQ ID NO:19, b is an integer of 15 to 1795, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:19, and where b is greater than or equal to a + 14.	R19470, R43810, R43810, R68471, R84396, H48527, H72808, H74042, H77919, N59326, W37177, W63751, AA054952, AA055414, AA075756, AA084216, AA167088, AA171933, AA283637, AA504517, AA526903, AA548976, AA720935, AA743227, AA876493, AA922502, AA935236, AA977747, AA985556, AA995834, AI085874, AI089849, N83890, AA643000
828267	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 695 of SEQ ID NO:20, b is an integer of 15 to 709, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:20, and where b is greater than or equal to a \pm 14.	R64277. R78171. R81344. R82497, R82551. H30248, N21678, N35076, N43816. N49970, N72024, N72025, W32428. W45005. W47341, W47466. AA023021. AA022495, AA160240. AA161105, AA160827, AA262229. AA460961. AA461270, AA503727. AA516264. AA587486. AA618498. AA577174, AA769656, AA806381. AA804907. AA814296. AA826741. AA872272. AA873216, AA877503. AA887257, AA888574, AA903406. AA946650, AI005204, F18545. AI096504, AI096416, C01329
828269	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 635 of SEQ ID NO:21, b is an integer of 15 to 649, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:21, and where b is greater than or equal to a + 14.	
828272	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1593 of SEQ ID NO:22, b is an integer of 15 to 1607, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:22, and where b is greater than or equal to a + 14.	R19809, H18934, H19375, H26539, AA055911, AA494436, AA587324, AA714132, C17882, C18668
828273	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 564 of SEQ ID NO:23, b is an integer of 15 to 578, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:23, and where b is greater than or equal to a + 14.	H19271
828290	1	T59898, T59989, T94867, T94912, T65240, T65292, T66052, T77599, R09165, R09268, R10580, R10581, T80506, T80507, R16318, R27636, R30800, R35595, R38849, R39241, R41395, R59117, R76584, R76585.

	positions of nucleotide residues shown in SEQ ID NO:24, and where b is greater than or equal to a + 14.	H09652, H09692, H11510, H11870, R83218, R91788, R91789, R96324, R96325, H57286, H72668, N74017, W02255, AA148639, AA148693, AA236061, AA236908, AA252747, AA259022, AA262883, AA278784, AA282771, AA284927, AA417594, AA456869, AA457026, AA482034, AA483364, AA483699, AA742268, AA831255
828326	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 2666 of SEQ ID NO:25, b is an integer of 15 to 2680, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:25, and where b is greater than or equal to a + 14.	T39632, T51535, T51684, T53316, T53317, T78655, R39299, R50091, R50092, R60242, R60477, H15498, H16190, H16348, H23875, H23876, H39694, H46597, H66845, H66889, H81508, H83033, N71968, N99700, W00835, W42577, W60798, W60929, AA040868, AA043137, AA100392, AA133460, AA133461, AA151301, AA190783, AA190331, AA232148, AA244332, AA244333, AA417836, AA468588, AA552068, AA622100, AA570065, AA568384, AA661530, AA689348, AA748424, AA767109, AA769292, AA809791, AA915876, AA931522, AA983494, AI081278, N85117, W22522
828397	Preferably excluded from the present invention are one or more polynucleotides comprising a mucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1845 of SEQ ID NO:26, b is an integer of 15 to 1859, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:26, and where b is greater than or equal to a + 14.	
828405	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 620 of SEQ ID NO:27, b is an integer of 15 to 634, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:27, and where b is greater than or equal to a + 14.	N27583
828461	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1618 of SEQ ID NO:28, b is an integer of 15 to 1632, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:28, and where b is greater than or equal to a + 14.	T89996, H96643, AA076642, AA079413, AA120823, AA120824, AA133102, AA128879, AA158349, AA158350, AA838312, C00042, AA642274
828482	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to	R12256, T79977, T81576, T83389, T97268, T97379, R16708, R39343, R69161, R69275, H15410, H15466, H29577, H29661, H50315, N34544.

	2525 of SEQ ID NO:29, b is an integer of 15 to	N47100. N62861, N67285,
	2539, where both a and b correspond to the	W24823. AA232725. AA236518.
	positions of nucleotide residues shown in SEQ ID	AA657840, AA736793. W26725
	NO:29, and where b is greater than or equal to a +	
	14.	
828488	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	480 of SEQ ID NO:30, b is an integer of 15 to 494,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:30, and	
	where b is greater than or equal to a + 14.	
828491	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1249 of SEQ ID NO:31, b is an integer of 15 to	
	1263, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:31, and where b is greater than or equal to a +	
	14.	
828492	Preferably excluded from the present invention are	
3_0.7_	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between I to	
	323 of SEQ ID NO:32, b is an integer of 15 to 337,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:32, and	
	where b is greater than or equal to a + 14.	
828494	Preferably excluded from the present invention are	T77590. R19349, H06686, N42827,
	one or more polynucleotides comprising a	N42891, N73270, W38326,
	nucleotide sequence described by the general	AA180136, AA194183, AA235257,
	formula of a-b, where a is any integer between 1 to	AA424380, AA902702, AA939089,
	1728 of SEQ ID NO:33, b is an integer of 15 to	AA977206, AA988001, AA996359
	1742, where both a and b correspond to the	121377200,7111900001,7111990339
	positions of nucleotide residues shown in SEQ ID	
	NO:33, and where b is greater than or equal to a +	
	114.	
828496	Preferably excluded from the present invention are	H16641, H81084, AA972362
	one or more polynucleotides comprising a	,
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1152 of SEQ ID NO:34, b is an integer of 15 to	
	1166, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:34, and where b is greater than or equal to a +	
	14.	
828498	Preferably excluded from the present invention are	T39930, T98680, R89124, R89756,
	one or more polynucleotides comprising a	R91725, R91820, R92013, R92158,
	nucleotide sequence described by the general	R94233, R94329, H59495, H61480,
	formula of a-b, where a is any integer between 1 to	H62771, H62831, H67085, H67621,
	1035 of SEQ ID NO:35, b is an integer of 15 to	H71835. H71836. H79855, H79856.
	1049, where both a and b correspond to the	N31924. N42760. N55543, N72715,
	positions of nucleotide residues shown in SEQ ID	N76929, N79841, W46350,
	NO:35, and where b is greater than or equal to a +	W46166, H97319, AA730300.
	114.	AA746151, AA887571, AA918492,
	14 14	FEET 10131, 1111001311, DAS10474,

····		A A 080417 A 1001035 B 20000
		AA989417. AI001025. D79228.
020504	Decfeed by the state of the sta	W38455. C15769
828504	Preferably excluded from the present invention are	}
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to 475 of SEQ ID NO:36, b is an integer of 15 to 489.	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:36, and	İ
828507	where b is greater than or equal to a + 14.	
020307	Preferably excluded from the present invention are one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	584 of SEQ ID NO:37. b is an integer of 15 to 598.	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:37, and	
020512	where b is greater than or equal to a + 14.	N27462
828512	Preferably excluded from the present invention are	N27463
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	748 of SEQ ID NO:38, b is an integer of 15 to 762,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:38, and	
	where b is greater than or equal to a + 14.	
828516	Preferably excluded from the present invention are	T56794, T56795, T84141, R02653,
	one or more polynucleotides comprising a	R20890. R24025. R33319, R33320
	nucleotide sequence described by the general	R34774, R67912, R69738, R77753
	formula of a-b, where a is any integer between 1 to	R77838, R81629. H15449, H15508
	1944 of SEQ ID NO:39, b is an integer of 15 to	H27402, H58932, H58979, H99151
	1958, where both a and b correspond to the	N20262, N24400, N25962, N29166
	positions of nucleotide residues shown in SEQ ID	N34977, N35438. N50797, N55154
	NO:39, and where b is greater than or equal to a +	W02966, W92783, W92882,
	14.	AA007585, AA036747, AA036997
		AA074474, AA102125, AA100655
		AA112751, AA113219, AA113805
		AA188790, AA541250, AA541763
		AA558310, AA559035, AA581570
		AA587474, AA569332, AA687823
		AA715063, AA918342, AA936443
		AA937851, AA947124, AA954522
		AA989224, AI017059, AI057158,
		AI088905. AI094996, AI096728,
		U46434. C01531
828519	Preferably excluded from the present invention are	W79671
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	463 of SEQ ID NO:40, b is an integer of 15 to 477,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:40, and	
	where b is greater than or equal to a + 14.	
828521	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
		1
	nucleotide sequence described by the general	

		,
	846 of SEQ ID NO:41. b is an integer of 15 to 860. where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:41. and where b is greater than or equal to a + 14.	
828522	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1117 of SEQ ID NO:42, b is an integer of 15 to 1131, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:42, and where b is greater than or equal to a + 14.	T54309, T63973, T64041, T89636, T90270, R62731, R63686, H98873, N25098, N36012, N38881, N44246, N67168, AA047726, AA081019, AA120775, AA120774, AA128274, AA128571, AA551864, AA767989, AA902693
828525	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1320 of SEQ ID NO:43, b is an integer of 15 to 1334, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:43, and where b is greater than or equal to a + 14.	T48657. T48687. T48861. T49081, T49118. T53559, T58581, R23090, R26432. R26979. R27855, R32999, R34608. R64482. R64537. R66662, R67745, R69150. R70688. R77130. R81861. R82246, R82815. H03531. N39770. N41593, N42044. N57142, N94149. AA029208. AA149385, AA234086. N26326, N30247, N30819. N32903. N39539. D78905, D79060. N63792. AA029209
828529	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2337 of SEQ ID NO:44, b is an integer of 15 to 2351, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:44, and where b is greater than or equal to a + 14.	
828530	1573 of SEQ ID NO:45, b is an integer of 15 to	T74290, T79269, R24408, R24409, R32342, R33507, R34284, R70908, H13795, H13794, N42196, AA013089, AA228469, AA505953, AA508121, AA602662, AA631903, AA865676, AA888323, AI032201, AA013090
828536	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 365 of SEQ ID NO:46, b is an integer of 15 to 379, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:46, and where b is greater than or equal to a + 14.	
828537	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1906 of SEQ ID NO:47, b is an integer of 15 to 1920, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID	

	<u> </u>	
	NO:47, and where b is greater than or equal to a + 14.	
828539	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
1	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	305 of SEQ ID NO:48, b is an integer of 15 to 319.	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:48, and	
	where b is greater than or equal to $a + 14$.	
828540	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
1	264 of SEQ ID NO:49, b is an integer of 15 to 278,	
İ	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:49, and	
	where b is greater than or equal to a + 14.	
828542	Preferably excluded from the present invention are	
=====================================	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	638 of SEQ ID NO:50, b is an integer of 15 to 652.	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:50, and	
	where b is greater than or equal to $a + 14$.	
828543	Preferably excluded from the present invention are	
0203.3	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	929 of SEQ ID NO:51, b is an integer of 15 to 943,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:51, and	
	where b is greater than or equal to a + 14.	
828544	Preferably excluded from the present invention are	
0203	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	818 of SEQ ID NO:52, b is an integer of 15 to 832,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:52, and	
	where b is greater than or equal to a + 14.	
828546		H25827, H45313, W77774,
	one or more polynucleotides comprising a	AA587295, AA595924, AA603051,
1	nucleotide sequence described by the general	C00427
	formula of a-b, where a is any integer between 1 to	
1	1540 of SEQ ID NO:53, b is an integer of 15 to	
	1554. where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
1	NO:53, and where b is greater than or equal to a +	
1	14.	
828550	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
]	nucleotide sequence described by the general	
]	formula of a-b, where a is any integer between 1 to	
	267 of SEQ ID NO:54, b is an integer of 15 to 281.	
	where both a and b correspond to the positions of	
L	John a and b correspond to the positions of	

	Ludovido residenciales de CCO ID NO CL	
	nucleotide residues shown in SEQ ID NO:54, and	
020551	where b is greater than or equal to a + 14.	1 1 2 2 1 2 2 5 2 1 5 1 1 2 2 2 5 2 5 7 5
828551	Preferably excluded from the present invention are	AA224996, AA225045, AA229587,
	one or more polynucleotides comprising a	AA524970, AA528287, AA569633,
	nucleotide sequence described by the general	AA577923
	formula of a-b, where a is any integer between 1 to	
	793 of SEQ ID NO:55. b is an integer of 15 to 807.	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:55, and	
	where b is greater than or equal to a + 14.	
828553	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	642 of SEQ ID NO:56, b is an integer of 15 to 656,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:56, and	
	where b is greater than or equal to a + 14.	
828557	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	780 of SEQ ID NO:57, b is an integer of 15 to 794,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:57, and	
	where b is greater than or equal to a + 14.	
828560		R77295, R77355, N50880.
020000	one or more polynucleotides comprising a	AA228477, AA229199, AA229332,
	nucleotide sequence described by the general	AA229430, AA229342, AA508222.
	Tall the second of the second	AA508881, AA508713, AA522664,
	1141 of SEQ ID NO:58, b is an integer of 15 to	AA525054, AA531563, AA564505,
	1155, where both a and b correspond to the	AA627496, AA569813, AA908306
	positions of nucleotide residues shown in SEQ ID	AA027490, AA309813, AA908300
	NO:58, and where b is greater than or equal to a +	
	114.	
828561	Preferably excluded from the present invention are	
828301		
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	478 of SEQ ID NO:59, b is an integer of 15 to 492,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:59, and	
000555	where b is greater than or equal to a + 14.	
828565	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1603 of SEQ ID NO:60, b is an integer of 15 to	
	1617, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:60, and where b is greater than or equal to a +	
	14.	
828566	Preferably excluded from the present invention are	T74741. R89314. H66527, H66526,
	1	H67472, H67473, H68173, H68172,
	,	
	nucleotide sequence described by the general	H96621, H96622, N27775, N28518, N33857, N66931, AA149826,

	1653, where both a and b correspond to the	AA188743
	positions of nucleotide residues shown in SEQ ID	
	NO:61, and where b is greater than or equal to a +	
	14.	
828567	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	426 of SEQ ID NO:62, b is an integer of 15 to 440,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:62. and	
	where b is greater than or equal to a + 14.	
828568	Preferably excluded from the present invention are	R01283, R62995, R63052, R97762,
	one or more polynucleotides comprising a	R97763, AA044146. AA044262,
	nucleotide sequence described by the general	AA150771, AA429074, AA282254,
	formula of a-b, where a is any integer between 1 to	AA282728. AA468569. AA586526,
	1048 of SEQ ID NO:63, b is an integer of 15 to	AA622172. AA631182, AA631273,
	1062, where both a and b correspond to the	AA809910. AA811682
	positions of nucleotide residues shown in SEQ ID	
	NO:63. and where b is greater than or equal to a +	
	14.	
828569	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	408 of SEQ ID NO:64, b is an integer of 15 to 422,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:64, and	
	where b is greater than or equal to a + 14.	
828570	Preferably excluded from the present invention are	H77440
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	1
	formula of a-b, where a is any integer between 1 to	
	695 of SEQ ID NO:65, b is an integer of 15 to 709,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:65, and	
	where b is greater than or equal to a + 14.	
828571	Preferably excluded from the present invention are	N27429, N34713, N51144,
	one or more polynucleotides comprising a	AA033703, AA033704, AA046488,
	nucleotide sequence described by the general	AA046700, AA180131, AA514866,
	formula of a-b, where a is any integer between 1 to	AA515411, AA527426, AA554163,
	1288 of SEQ ID NO:66, b is an integer of 15 to	AA745008, AA805885, AA862045,
	1302, where both a and b correspond to the	AA953025, AI075070
	positions of nucleotide residues shown in SEQ ID	
	NO:66, and where b is greater than or equal to a +	
	14.	
828574	Preferably excluded from the present invention are	T92929, T93045, T92007, T92093,
	one or more polynucleotides comprising a	T98007, R28667, N79460,
	nucleotide sequence described by the general	AA614258, AA741201. AA847513,
	formula of a-b, where a is any integer between 1 to	AI083735
	1032 of SEQ ID NO:67, b is an integer of 15 to	
	1046, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:67, and where b is greater than or equal to a +	
	14.	
828575	Preferably excluded from the present invention are	AA837738
	one or more polynucleotides comprising a	

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	nucleotide sequence described by the general	
Ì	formula of a-b, where a is any integer between 1 to	
	487 of SEQ ID NO:68, b is an integer of 15 to 501,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:68, and	
	where b is greater than or equal to $a + 14$.	
828577	Preferably excluded from the present invention are	AA169882. AA169883
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	567 of SEQ ID NO:69, b is an integer of 15 to 581,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:69. and	
	where b is greater than or equal to a + 14.	
828578	Preferably excluded from the present invention are	T39452, T46945, T47319, T53621,
020370	one or more polynucleotides comprising a	T53622, T61271, T61323, R21194,
	nucleotide sequence described by the general	1
	formula of a-b, where a is any integer between 1 to	R22811, R24705, R25199, R50467,
	1062 of SEQ ID NO:70. b is an integer of 15 to	R50468, R53758, R53759, R63087,
	1076. where both a and b correspond to the	R63131, R63969, R64075, R70570,
		R77117, R77118, R80611, R80612,
	positions of nucleotide residues shown in SEQ ID	H00653, H00742, H02619, H02725,
	NO:70, and where b is greater than or equal to a + 14.	N32242, N57336, N69947, N80785,
ļ.	14.	N98328, N98569, W15554,
		AA029021, AA029143, AA037587,
		AA131825, AA131992, AA229266,
		AA507524, AA533307, AA533431,
		AA534110, AA534166, AA534281,
		AA535170, AA586608, AA593596,
		AA838623, AA885780, AA936945,
		AA642546
828580	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	362 of SEQ ID NO:71, b is an integer of 15 to 376,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:71, and	
	where b is greater than or equal to a + 14.	
828581	Preferably excluded from the present invention are	AA507628
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	360 of SEQ ID NO:72, b is an integer of 15 to 374,	
İ	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:72, and	
	where b is greater than or equal to a + 14.	
828583	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	405 of SEQ ID NO:73, b is an integer of 15 to 419,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:73, and	
	where b is greater than or equal to a + 14.	
828585		AA234220
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	

	formula of a-b. where a is any integer between 1 to	
	272 of SEQ ID NO:74, b is an integer of 15 to 286.	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:74, and	
	where b is greater than or equal to a + 14.	
828587	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	619 of SEQ ID NO:75, b is an integer of 15 to 633,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:75, and	
	where b is greater than or equal to a + 14.	
828590	Preferably excluded from the present invention are	
1	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	242 of SEQ ID NO:76, b is an integer of 15 to 256,	
1	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:76, and	
	where b is greater than or equal to a + 14.	
828592	Preferably excluded from the present invention are	R52221, R54548, R97331, H57211,
	one or more polynucleotides comprising a	H55375, H55650
	nucleotide sequence described by the general	İ
	formula of a-b, where a is any integer between 1 to	
	680 of SEQ ID NO:77, b is an integer of 15 to 694,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:77, and	
22222	where b is greater than or equal to a + 14.	
828593	Preferably excluded from the present invention are	T57629, T58982, R19824, R45052,
	one or more polynucleotides comprising a	R45052, R55638, R59495, H18527,
1	nucleotide sequence described by the general	H19193, H28411, H39750, H62246,
	formula of a-b, where a is any integer between 1 to	H62335, H91342, N62586, N63264,
	2548 of SEQ ID NO:78, b is an integer of 15 to 2562, where both a and b correspond to the	N80359, W81015, W94481,
		W94746, AA011589, AA029848,
	positions of nucleotide residues shown in SEQ ID	AA028978, AA043902, AA114931,
	NO:78, and where b is greater than or equal to a + 14.	AA114930, AA191597, AA232906,
	14.	AA233035, AA258137, AA287367,
		AA287505, AA506450, AA525766,
		AA526128, AA548114, AA592904,
		AA808705, AA837733, AA876630,
828594	Preferably excluded from the present invention are	AA908724, N90333, AA007166
020374	one or more polynucleotides comprising a	R06875, R06876, H89673, AA036961, AA150107, AA150515,
	nucleotide sequence described by the general	AA983641
	formula of a-b, where a is any integer between 1 to	2 41/03041
	1596 of SEQ ID NO:79, b is an integer of 15 to	
	1610, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:79, and where b is greater than or equal to a +	
	114.	
828596		R09863, T84746, T98848, W01274,
023070	one or more polynucleotides comprising a	W48629, AA082189, AA426550.
	nucleotide sequence described by the general	C04056
	formula of a-b, where a is any integer between 1 to	
	1034 of SEQ ID NO:80, b is an integer of 15 to	
	1048, where both a and b correspond to the	
	pro to, miles com a and o contempond to the	

	positions of nucleotide residues shown in SEQ ID NO:80, and where b is greater than or equal to a + 14.	
828597	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1122 of SEQ ID NO:81, b is an integer of 15 to 1136, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:81, and where b is greater than or equal to a + 14.	R41797, R41797, H61049, N58312, N79783, W07281, W23730, W23738, W35330, W35337, AA235295, AA935231, AA995710, AI017376, AI088874, AI096890, W27549
828598	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 283 of SEQ ID NO:82, b is an integer of 15 to 297, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:82, and where b is greater than or equal to a + 14.	
828601	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 2136 of SEQ ID NO:83, b is an integer of 15 to 2150, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:83, and where b is greater than or equal to a + 14.	
828605	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 587 of SEQ ID NO:84, b is an integer of 15 to 601, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:84, and where b is greater than or equal to a + 14.	
828608	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 520 of SEQ ID NO:85, b is an integer of 15 to 534, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:85, and where b is greater than or equal to a + 14.	AA244003, AA244034, AA506324
828609	Preferably excluded from the present invention are	N48056, N52932, N53254, N64840, N75691, AI050871
828610		AA177029, AA177023, AA176984, AA177153, AA216404, AA224959, AA225025, AA225109, AA225143,

formula of a-b, where a is any integer between 1 to 583 of SEQ ID NO:87, b is an integer of 15 to 597, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:87, and where b is greater than or equal to a + 14.

AA225206, AA225152, AA225228, AA225308, AA225322, AA225213, AA225409, AA225879, AA225880, AA225963, AA225974, AA226101. AA226227. AA226240, AA226384, AA226459, AA226556, AA226623, AA226632. AA226680, AA229222. AA229223. AA229482, AA229756, AA229964, AA244017, AA244091, AA244178, AA244052, AA244362, AA244452, AA397457, AA420631, AA420632. AA420633, AA420826, AA469131, AA469154, AA469201, AA469209, AA469226, AA469293, AA469373, AA470501, AA470548, AA492204. AA492255, AA492295, AA492311. AA492312, AA492327, AA492329. AA492334, AA492382, AA492389, AA492411, AA492438, AA492445. AA492451, AA494242, AA494243, AA494246, AA493268, AA493332, AA493445, AA502071, AA502154, AA502180, AA502191, AA502200, AA502978, AA502981, AA503115, AA503349, AA503429, AA503609, AA503666, AA503677, AA503682, AA503909, AA503926, AA504051, AA504066, AA506197, AA506319, AA506330, AA506475, AA506731, AA506804, AA506914, AA507128, AA507215, AA507217, AA507281, AA507287, AA507305, AA507373, AA507510, AA507545, AA507615, AA507633, AA507659, AA507664, AA507669, AA507679, AA507685. AA507759, AA507769, AA507778, AA507785, AA507789, AA507968, AA507983, AA507996, AA507995, AA508013, AA508078, AA508096, AA508112, AA508128, AA508144, AA508348, AA508360, AA508636, AA513240, AA514804, AA514915, AA516492, AA516500, AA522599, AA524675, AA524914, AA524998, AA525091, AA526491, AA526493, AA527728, AA527825, AA528273, AA530882, AA530906, AA530942, AA530954, AA531208, AA531341, AA531361, AA531381, AA531498, AA532578, AA532712, AA532960, AA533031, AA533053, AA533162, AA533961, AA534135, AA535497. AA535744. AA541576, AA541642, AA548220, AA548400, AA551463, AA551698, AA551727, AA551737, AA552827, AA552829, AA557784, AA557804, AA558634,

		AA564543, AA564966, AA565164,
		AA588853, AA588270, AA587824,
		AA588630, AA593049, AA593065,
		AA594830, AA594923, AA595627,
		AA603351, AA603362. AA603437,
		AA603827, AA603877, AA603879,
		AA630927, AA635332, AA635394,
		AA635542, AA635549, AA635909,
		AA636004, AA639312, AA639995,
		AA640184, AA640298, AA640342.
		AA569556, AA570614, AA572857,
		AA574208, AA574209, AA574212,
		AA574273, AA580026, AA578701,
		AA578799, AA578900, AA579004,
		AA579008, AA579351, AA568108,
		AA568415, AA654920. AA654956,
		AA657393, AA657432, AA657479,
		AA657506, AA657531, AA657541,
		AA657686, AA657800, AA657938,
		AA658414. AA658873, AA659224,
		AA659592, AA659778, AA661727,
		AA662090, AA662125, AA662301,
		1
		AA687536, AA687632, AA715325, AA807843, AA809523, AA809593,
		AA640904, AA640929, AA642080,
		AA642520
828617	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	460 of SEQ ID NO:88, b is an integer of 15 to 474,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:88, and	
	where b is greater than or equal to a + 14.	
828620	Preferably excluded from the present invention are	AA228288, AA492280, AA507777,
	one or more polynucleotides comprising a	AA508355, AA527737, AA527805,
	nucleotide sequence described by the general	AA559165, AA559352, AA564484,
	formula of a-b, where a is any integer between 1 to	AA602957, AA659719, AA642055
	1523 of SEQ ID NO:89, b is an integer of 15 to	
	1537, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:89, and where b is greater than or equal to a +	
	14.	
828621	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	290 of SEQ ID NO:90, b is an integer of 15 to 304,	1
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:90, and	
	where b is greater than or equal to $a + 14$.	
828622	Preferably excluded from the present invention are	AA570443
3_30_5	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	355 of SEQ ID NO:91, b is an integer of 15 to 369,	
	where both a and b correspond to the positions of	
	princip both a and b correspond to the positions of	<u> </u>

	nucleotide residues shown in SEQ ID NO:91, and	
	where b is greater than or equal to a + 14.	
828623	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	301 of SEQ ID NO:92, b is an integer of 15 to 315,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:92, and	
	where b is greater than or equal to a + 14.	
828625	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	687 of SEQ ID NO:93, b is an integer of 15 to 701,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:93, and	
	where b is greater than or equal to a + 14.	
828632	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
j	nucleotide sequence described by the general	
1	formula of a-b, where a is any integer between 1 to	
	445 of SEQ ID NO:94, b is an integer of 15 to 459,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:94, and	
	where b is greater than or equal to a + 14.	
828635	Preferably excluded from the present invention are	R13230, R19016, R35012, R40312,
1	one or more polynucleotides comprising a	R44087, R46776, R49399, R44087,
		R40312, R49399, H22883, H24275,
		H71951, N73720, W03891,
	2575 of SEQ ID NO:95, b is an integer of 15 to	W95360, W95359, AA055316,
	2589, where both a and b correspond to the	AA055317, AA135153, AA135291,
		AA195210, AA195427, AA236624,
	_	AA237000, AA548249, AA553712.
		AA595319, AA770603, AA947028,
		D78699
828637	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	443 of SEQ ID NO:96, b is an integer of 15 to 457,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:96, and	
000600	where b is greater than or equal to a + 14.	
828639	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	-
	502 of SEQ ID NO:97, b is an integer of 15 to 516,	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:97, and	
020645	where b is greater than or equal to a + 14.	
828645	Preferably excluded from the present invention are	ļ
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	300 of SEQ ID NO:98, b is an integer of 15 to 314.	l

	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:98, and	
	where b is greater than or equal to a + 14.	
828648	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	665 of SEQ ID NO:99, b is an integer of 15 to 679.	
	where both a and b correspond to the positions of	
	nucleotide residues shown in SEQ ID NO:99, and	
	where b is greater than or equal to a + 14.	
828649	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	585 of SEQ ID NO:100. b is an integer of 15 to	
	599, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:100.	
	and where b is greater than or equal to a + 14.	
828651	Preferably excluded from the present invention are	
020031	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1175 of SEQ ID NO:101, b is an integer of 15 to	
	1189, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:101, and where b is greater than or equal to a +	
	14.	
828652	Preferably excluded from the present invention are	
626032	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	237 of SEQ ID NO:102, b is an integer of 15 to	
	251, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:102,	
020755	and where b is greater than or equal to a + 14.	
828655	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	444 of SEQ ID NO:103, b is an integer of 15 to	
	458, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:103,	
	and where b is greater than or equal to a + 14.	
828657	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	425 of SEQ ID NO:104, b is an integer of 15 to	
	439, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:104,	•
	and where b is greater than or equal to a + 14.	
828660	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	219 of SEQ ID NO:105. b is an integer of 15 to	
828660	Preferably excluded from the present invention are one or more polynucleotides comprising a	
	formula of a-b, where a is any integer between 1 to	
	E19 of SEQ ID NO:103. b is an integer of 15 to	

	233, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:105.	
	and where b is greater than or equal to a + 14.	
828663	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	690 of SEQ ID NO:106. b is an integer of 15 to	
	704, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:106,	
929777	and where b is greater than or equal to a + 14.	
828666	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	431 of SEQ ID NO:107, b is an integer of 15 to	
	445, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:107.	
	and where b is greater than or equal to a + 14.	
828668	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	578 of SEQ ID NO:108, b is an integer of 15 to	
	592, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:108,	
	and where b is greater than or equal to a + 14.	
828669	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	367 of SEQ ID NO:109, b is an integer of 15 to	
	381, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:109,	
	and where b is greater than or equal to a + 14.	
828670		W38772
020070	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	337 of SEQ ID NO:110, b is an integer of 15 to	
	351, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:110,	
	and where b is greater than or equal to $a + 14$.	
828671		
020071	Preferably excluded from the present invention are	
-	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1569 of SEQ ID NO:111, b is an integer of 15 to	
	1583, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:111, and where b is greater than or equal to a +	
	14.	
828672	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	ļ
	formula of a-b, where a is any integer between 1 to	İ
	417 of SEQ ID NO:112, b is an integer of 15 to	

	431, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:112.	
	and where b is greater than or equal to $a \pm 14$.	
828675	Preferably excluded from the present invention are	T56042, T56076, T39529, T39565,
	one or more polynucleotides comprising a	R20801, R20914, R99174, W76346,
	nucleotide sequence described by the general	AA070283, AA100602, AA186719,
	formula of a-b, where a is any integer between 1 to	AA192887, AA258594, AA258623,
	2828 of SEQ ID NO:113, b is an integer of 15 to	AA262429, AA458551, AA425795,
	2842. where both a and b correspond to the	AA426147, AA426000, AA428422.
	positions of nucleotide residues shown in SEQ ID	AA428672, AA429274, AA429569.
	r · · · · · · · · · · · · · · · · · · ·	AA429700, AA280808, AA280860.
	14.	AA583152, AA604621, AA573460,
		AA737552, AA745643, AA809317.
1		AA811436, AA831842, AA832058,
		AA837490, AA847879, AI089925,
		AA070162
828677	Preferably excluded from the present invention are	11070102
020077	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	254 of SEQ ID NO:114, b is an integer of 15 to	
	268, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:114,	
	and where b is greater than or equal to a + 14.	
828678	Preferably excluded from the present invention are	
1	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
İ	formula of a-b, where a is any integer between 1 to	
	786 of SEQ ID NO:115, b is an integer of 15 to	
	800, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:115,	
	and where b is greater than or equal to a + 14.	
828679	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	<u> </u>
	632 of SEQ ID NO:116, b is an integer of 15 to	
	646, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:116,	
	and where b is greater than or equal to a + 14.	
828680	Preferably excluded from the present invention are	N64514, N70990, W01522,
		AA025937, AA025996, AA210760,
	nucleotide sequence described by the general	AA215724, AA761682, AA768989,
		AA911839
	1520 of SEQ ID NO:117, b is an integer of 15 to	
	1534, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:117, and where b is greater than or equal to a +	
	14.	
828681	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	325 of SEQ ID NO:118, b is an integer of 15 to	
1	339, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:118,	
	and where b is greater than or equal to a + 14.	

020702	D C 11 111C 1	
828682	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	651 of SEQ ID NO:119, b is an integer of 15 to	
	665, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:119.	
	and where b is greater than or equal to a + 14.	
828683	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	608 of SEQ ID NO:120. b is an integer of 15 to	
	622, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:120.	
	and where b is greater than or equal to a + 14.	
828686	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	875 of SEQ ID NO:121. b is an integer of 15 to	
	889, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:121,	
	and where b is greater than or equal to a + 14.	
828687	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between I to	
]	118 of SEQ ID NO:122, b is an integer of 15 to	
	132, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:122,	
000000	and where b is greater than or equal to a + 14.	TOOTO 4 TOOO 1 6 NISSEE 6 NISSEE
828688	Preferably excluded from the present invention are	T92794, T92816, N50876, W20089,
		N90429, AA086404, AA112766,
		AA130846, AA195042, AA194974,
		AA235868, AA554284, AA639411,
		AA573456, AA804901, AA828540
	1900, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:123, and where b is greater than or equal to a +	
920600	Describits avaluded from the magant invention are	
828689	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to	
	1236 of SEQ ID NO:124, b is an integer of 15 to	
	1250, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID	
	NO:124, and where b is greater than or equal to a +	
	114.	
828692		T72780, R07981, R09868, T96304,
020092	· ·	H51978
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1175 of SEQ ID NO:125, b is an integer of 15 to	
	1175 of SEQ 1D NO.125, b is an integer of 15 to	
	positions of nucleotide residues shown in SEQ ID	

	NO.125 and where his according to	Т
	NO:125, and where b is greater than or equal to a + 114.	
828693	Preferably excluded from the present invention are	
020075	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	414 of SEQ ID NO:126. b is an integer of 15 to	
	428, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:126,	
	and where b is greater than or equal to $a + 14$.	
828694	Preferably excluded from the present invention are	R02262
02007.	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	631 of SEQ ID NO:127, b is an integer of 15 to	
	645, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:127.	
	and where b is greater than or equal to a + 14.	
828696	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	482 of SEQ ID NO:128, b is an integer of 15 to	
	496, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:128,	
	and where b is greater than or equal to a + 14.	
828697		AA059063
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	410 of SEQ ID NO:129, b is an integer of 15 to	
	424, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:129,	
	and where b is greater than or equal to a + 14.	
828699		R75912, H40206, H40207, H41559,
	•	R87478, H52696, H52717, N40190,
		AA503759, AA504325, AA553825,
		AA553899, H64647, AA582193,
	1695 of SEQ ID NO:130, b is an integer of 15 to	AA580220, AA687790, AA809845,
		AA917674, AA935183, AI004172,
		AI027576, C14410, C14461,
	NO:130, and where b is greater than or equal to a +	C14497, C14511
	14.	
828702	, , , , , , , , , , , ,	N79392
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	i.
	852 of SEQ ID NO:131, b is an integer of 15 to	
	866, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:131,	
	and where b is greater than or equal to a + 14.	
828703		T69829, R59224. H11661,
	I '	AA587352, AA807572, AA806747,
		AA865576, AA912231, AI002338
	formula of a-b, where a is any integer between 1 to	
	1579 of SEQ ID NO:132, b is an integer of 15 to	

	positions of nucleotide residues shown in SEQ ID	
	NO:132, and where b is greater than or equal to a +	
İ	14.	
828704	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	394 of SEQ ID NO:133, b is an integer of 15 to	
	408, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:133.	
	and where b is greater than or equal to a + 14.	
828706	Preferably excluded from the present invention are	AA099313, AA099927, AA101522,
	•	AA101521, AA102781, AA102782.
	nucleotide sequence described by the general	AA126249. AA134732, AA459009.
	formula of a-b, where a is any integer between 1 to	AA459230. AA524248. AA524247.
	2727 of SEQ ID NO:134, b is an integer of 15 to	AA622869, AA744977, AA933725.
		AI000417, U65740
	positions of nucleotide residues shown in SEQ ID	
,	NO:134, and where b is greater than or equal to a +	
	14.	
828708	Preferably excluded from the present invention are	AA736960
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	672 of SEQ ID NO:135, b is an integer of 15 to	
	686, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:135,	
	and where b is greater than or equal to a + 14.	
828711	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	228 of SEQ ID NO:136, b is an integer of 15 to	
	242, where both a and b correspond to the positions	
ĺ	of nucleotide residues shown in SEQ ID NO:136,	
	and where b is greater than or equal to a + 14.	
828712	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	ļ
	formula of a-b, where a is any integer between 1 to	
	531 of SEQ ID NO:137, b is an integer of 15 to	
	545, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:137,	
	and where b is greater than or equal to a + 14.	
828713	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
.	formula of a-b, where a is any integer between 1 to	
	382 of SEQ ID NO:138, b is an integer of 15 to	
	396, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:138,	
920711	and where b is greater than or equal to a + 14.	
828714	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2757 of SEQ ID NO:139. b is an integer of 15 to	

	2771. where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:139, and where b is greater than or equal to a +	
:	14.	
828715	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	408 of SEQ ID NO:140, b is an integer of 15 to	
	422, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:140.	
	and where b is greater than or equal to a + 14.	
828718		R52059, R52058, H85868,
020110	one or more polynucleotides comprising a	W92475, AA046292, AA463500,
	nucleotide sequence described by the general	AA463546. AA576113. AA862446
	formula of a-b, where a is any integer between 1 to	1 1 1 1 0 5 5 1 1 1 1 5 7 0 1 1 5 , 1 1 1 1 0 0 2 4 4 0
	1616 of SEQ ID NO:141. b is an integer of 15 to	
	1630. where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:141, and where b is greater than or equal to a +	
	114.	
828723	Preferably excluded from the present invention are	
020,23	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	250 of SEQ ID NO:142, b is an integer of 15 to	
	264, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:142,	
828726	and where b is greater than or equal to a + 14.	
020720	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	·
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	622 of SEQ ID NO:143, b is an integer of 15 to	
	636, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:143,	
020220	and where b is greater than or equal to a + 14.	NI20500 W05650 A 4007701
828728		N39508, W05658, AA083301,
		AA159253, AA195825
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	486 of SEQ ID NO:144, b is an integer of 15 to	
	500, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:144,	
020720	and where b is greater than or equal to a + 14.	
828730	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1931 of SEQ ID NO:145, b is an integer of 15 to	
	1945. where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:145, and where b is greater than or equal to a +	
000	14.	
828732	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	

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	formula of a-b, where a is any integer between 1 to	
	1100 of SEQ ID NO:146. b is an integer of 15 to	
	1114, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:146, and where b is greater than or equal to a +	
	14.	
828733	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	532 of SEQ ID NO:147, b is an integer of 15 to	
	546, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:147,	
	and where b is greater than or equal to a + 14.	
828735	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	1749 of SEQ ID NO:148. b is an integer of 15 to	
	1763, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:148, and where b is greater than or equal to a +	
	14.	
828736	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between I to	
	357 of SEQ ID NO:149, b is an integer of 15 to	
	371, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:149,	
	and where b is greater than or equal to a + 14.	
828739		R36043
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	418 of SEQ ID NO:150, b is an integer of 15 to	
	432, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:150,	
	and where b is greater than or equal to a + 14.	
828740	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	387 of SEQ ID NO:151, b is an integer of 15 to	
	401, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:151,	
	and where b is greater than or equal to a + 14.	
828742	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	837 of SEQ ID NO:152, b is an integer of 15 to	
	851, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:152,	
	and where b is greater than or equal to a + 14.	
828748		AA225966, AA226113, AA229173,
020/70		AA229167, AA229535, AA243985,
	pine of more polynaciconaes comprising a	MALLOTOT, MM243983, MM243983,

		1 2. 1. 1. 2. 1. 2. 1. 2. 1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.
	nucleotide sequence described by the general	AA244099. AA244206. AA259243,
	formula of a-b, where a is any integer between 1 to	AA420690. AA467761. AA467944.
	1664 of SEQ ID NO:153. b is an integer of 15 to	AA468120. AA468151. AA468187.
	1678, where both a and b correspond to the	AA468326, AA468918, AA468995,
	positions of nucleotide residues shown in SEQ ID	AA469129, AA469199, AA470575,
	NO:153, and where b is greater than or equal to a +	AA502955, AA503272, AA506649.
	14.	AA507335, AA507799, AA514825,
	·	AA522473. AA522848. AA524651.
		AA524893, AA525058, AA531386,
		AA532387, AA532926, AA534072,
		AA534246. AA535303. AA535837,
		AA551447. AA551738, AA558900,
		AA588263. AA587715, AA593380.
		AA595047, AA595357, AA595465,
		AA595601, AA603572, AA604709,
		AA635888, AA640473, AA569666,
		AA569670, AA573539, AA573587,
		AA574390, AA578439, AA578628,
		AA579001, AA579026, AA579117.
		AA579310, AA565962, AA566046,
		AA654974. AA657781. AA657831,
		AA658156. AA658207, AA658243,
		AA658463. AA658877. AA659198,
		AA659306, AA687563, AA687852,
		AA742871. AA876666, AA887095,
		AA888488, AA934855, AA935419,
		1
828749	Preferably excluded from the present invention are	AA937807, AA937854, AA978237 T65384, R46577, R52660, R46577,
020147	one or more polynucleotides comprising a	H11492. N73810, N99718,
	nucleotide sequence described by the general	AA121044, AA126520, AA126579,
	• •	AA126687
	1144 of SEQ ID NO:154, b is an integer of 15 to	
	1158, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:154, and where b is greater than or equal to a +	
929752	14.	4 4 402170
828752	Preferably excluded from the present invention are	AA492170
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1955 of SEQ ID NO:155, b is an integer of 15 to	
	1969, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:155, and where b is greater than or equal to a +	
	14.	
828753	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	386 of SEQ ID NO:156, b is an integer of 15 to	
	400, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:156,	
	and where b is greater than or equal to $a + 14$.	
828754		N42714, N32500
	lone or more polynucleotides comprising a	
	one or more polynucleotides comprising a nucleotide sequence described by the general	
	nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to	

	708 of SEQ ID NO:157, b is an integer of 15 to	
	722, where both a and b correspond to the positions	
1	of nucleotide residues shown in SEQ ID NO:157.	
	and where b is greater than or equal to a + 14.	
828757	Preferably excluded from the present invention are	T90246, T90691, R14702, R34647,
	one or more polynucleotides comprising a	R42424, R49176, R42424, R49176,
	nucleotide sequence described by the general	H06287, H06339, H14778, N69116,
	formula of a-b, where a is any integer between 1 to	C03936, C15913
	1186 of SEQ ID NO:158, b is an integer of 15 to	(203)30, (213)13
	1200, where both a and b correspond to the	
]	positions of nucleotide residues shown in SEQ ID	
	NO:158, and where b is greater than or equal to a +	
	•	
2007/1	14.	
828761	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	331 of SEQ ID NO:159, b is an integer of 15 to	
	345, where both a and b correspond to the positions	
•	of nucleotide residues shown in SEQ ID NO:159.	
	and where b is greater than or equal to a + 14.	
828762	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	462 of SEQ ID NO:160, b is an integer of 15 to	
	476, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:160,	
	and where b is greater than or equal to a + 14.	
828764	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	506 of SEQ ID NO:161, b is an integer of 15 to	
	520, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:161,	
	and where b is greater than or equal to $a + 14$.	
828765	Preferably excluded from the present invention are	
020703	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	325 of SEQ ID NO:162, b is an integer of 15 to	
	339, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:162,	
828766	and where b is greater than or equal to a + 14.	
828700	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	343 of SEQ ID NO:163, b is an integer of 15 to	
	357, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:163.	
	and where b is greater than or equal to a + 14.	
828767	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	

	1.042 2000 1000	
	1065 of SEQ ID NO:164, b is an integer of 15 to	
	1079, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:164, and where b is greater than or equal to a +	
	_ 14.	
828768	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1311 of SEQ ID NO:165, b is an integer of 15 to	
	1325, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:165, and where b is greater than or equal to a +	
	14.	
828770	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	380 of SEQ ID NO:166. b is an integer of 15 to	
	394, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:166.	
	and where b is greater than or equal to a + 14.	
828771	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	503 of SEQ ID NO:167, b is an integer of 15 to	
	517, where both a and b correspond to the positions	}
	of nucleotide residues shown in SEQ ID NO:167,	
828772	and where b is greater than or equal to a + 14.	
828//2	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	327 of SEQ ID NO:168, b is an integer of 15 to 341, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:168.	
	and where b is greater than or equal to a + 14.	
828773	Preferably excluded from the present invention are	
020113	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	336 of SEQ ID NO:169, b is an integer of 15 to	
	350, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:169,	
	and where b is greater than or equal to $a + 14$.	
828775	Preferably excluded from the present invention are	
020773	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	427 of SEQ ID NO:170, b is an integer of 15 to	
	441, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:170,	
	and where b is greater than or equal to $a + 14$.	
828776		AA127485
020110	one or more polynucleotides comprising a	100
	nucleotide sequence described by the general	
	practication sequence described by the general	!

	formula of a-b, where a is any integer between 1 to	
	389 of SEQ ID NO:171, b is an integer of 15 to	
	403, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:171.	
	and where b is greater than or equal to a + 14.	
828777	Preferably excluded from the present invention are	T86451, R87531, R87627, R91402,
	one or more polynucleotides comprising a	R92659. H98729. N24299.
	nucleotide sequence described by the general	W19089, W20421, AA454940,
	formula of a-b, where a is any integer between 1 to	AA605076, AA639539, AA662751,
	970 of SEQ ID NO:172. b is an integer of 15 to	AA714010, AA743934, AA746310,
1	`	AA888099. AA953728. AA976688,
	of nucleotide residues shown in SEQ ID NO:172.	AI027564
	and where b is greater than or equal to $a + 14$.	11027307
828778	Preferably excluded from the present invention are	
020770	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	1180 of SEQ ID NO:173, b is an integer of 15 to	
	1194. where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:173, and where b is greater than or equal to a +	
	14.	
828780	Preferably excluded from the present invention are	
020,00	one or more polynucleotides comprising a	
1	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	687 of SEQ ID NO:174. b is an integer of 15 to	
	701, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:174,	
	and where b is greater than or equal to a + 14.	
828781		R17769, R39304, R42342, R42342,
020701	·	R61526, H05114, H08622, N63035,
		AA039717, AA039716, AA039852,
1	I. ·	AA235700, AA255466, AA461108,
		AA918115, AA938595, W00511,
		C00278
	positions of nucleotide residues shown in SEQ ID	200270
	NO:175, and where b is greater than or equal to a +	
	14.	
828782	Preferably excluded from the present invention are	
020.02	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
<u> </u>	formula of a-b, where a is any integer between 1 to	
]	475 of SEQ ID NO:176, b is an integer of 15 to	
	489, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:176,	
	and where b is greater than or equal to a + 14.	
828783	Preferably excluded from the present invention are	
020.03	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between I to	
	239 of SEQ ID NO:177, b is an integer of 15 to	
	253, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:177,	
	and where b is greater than or equal to $a + 14$.	
828784	Preferably excluded from the present invention are	
020704	one or more polynucleotides comprising a	
	one of more polynacicondes comprising a	

	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	379 of SEQ ID NO:178, b is an integer of 15 to	
	393, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:178,	
	and where b is greater than or equal to $a + 14$.	
828785	Preferably excluded from the present invention are	H28735, AA541256, AA935694
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	451 of SEQ ID NO:179, b is an integer of 15 to	
	465, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:179,	
	and where b is greater than or equal to a + 14.	
828786	Preferably excluded from the present invention are	Т50920
020,00	one or more polynucleotides comprising a	150720
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	518 of SEQ ID NO:180. b is an integer of 15 to	
	532, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:180,	
	and where b is greater than or equal to a + 14.	
828788		AA765439
020700	one or more polynucleotides comprising a	AA703439
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	800 of SEQ ID NO:181, b is an integer of 15 to	
	814, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:181,	
828790	and where b is greater than or equal to a + 14.	
828790	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	303 of SEQ ID NO:182, b is an integer of 15 to	
	317, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:182,	
020701	and where b is greater than or equal to a + 14.	·
828791	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	229 of SEQ ID NO:183, b is an integer of 15 to	
	243, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:183,	
000700	and where b is greater than or equal to a + 14.	
828792	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1134 of SEQ ID NO:184, b is an integer of 15 to	
	1148, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:184, and where b is greater than or equal to a +	
	14.	
828794	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	

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	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	1957 of SEQ ID NO:185, b is an integer of 15 to	
	1971, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:185, and where b is greater than or equal to a +	
	14.	
828797	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	352 of SEQ 1D NO:186, b is an integer of 15 to	
	366, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:186,	
	and where b is greater than or equal to a + 14.	
828798	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	336 of SEQ ID NO:187, b is an integer of 15 to	
	350, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:187.	
	and where b is greater than or equal to a + 14.	
828799	First State of the state of the	R92181
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	361 of SEQ ID NO:188, b is an integer of 15 to	
	375, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:188,	
	and where b is greater than or equal to a + 14.	
828801	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	351 of SEQ ID NO:189, b is an integer of 15 to	
	365, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:189,	
	and where b is greater than or equal to a + 14.	
828802	Preferably excluded from the present invention are	,
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	803 of SEQ ID NO:190, b is an integer of 15 to	
	817, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:190,	
	and where b is greater than or equal to a + 14.	
828803	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	ļ
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	576 of SEQ ID NO:191, b is an integer of 15 to	
	590, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:191,	
	and where b is greater than or equal to a + 14.	
828804	Desfauchly avaluded from the propert invention are	
	Preferably excluded from the present invention are one or more polynucleotides comprising a	

		· · · · · · · · · · · · · · · · · · ·
	nucleotide sequence described by the general	
{	formula of a-b, where a is any integer between 1 to	
	294 of SEQ ID NO:192, b is an integer of 15 to	
	308, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:192.	
	and where b is greater than or equal to a + 14.	
828805	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	329 of SEQ ID NO:193, b is an integer of 15 to	
	343, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:193,	
}	and where b is greater than or equal to $a + 14$.	
828807	Preferably excluded from the present invention are	AA507550, AA613671, AA991871.
020007	one or more polynucleotides comprising a	A1073898
	nucleotide sequence described by the general	11073030
	formula of a-b. where a is any integer between 1 to	
ļ	676 of SEQ ID NO:194, b is an integer of 15 to	
	690. where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:194,	
	and where b is greater than or equal to $a + 14$.	
828809	Preferably excluded from the present invention are	
020009	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	223 of SEQ ID NO:195, b is an integer of 15 to	
	237, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:195,	
	and where b is greater than or equal to a + 14.	
828810	Preferably excluded from the present invention are	
828810	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	253 of SEQ ID NO:196, b is an integer of 15 to	
	267, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:196,	
	and where b is greater than or equal to $a + 14$.	
828811	Preferably excluded from the present invention are	
020011	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	429 of SEQ ID NO:197, b is an integer of 15 to	
	443, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:197,	
	and where b is greater than or equal to $a + 14$.	
828817	Preferably excluded from the present invention are	
020017	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	194 of SEQ ID NO:198, b is an integer of 15 to	
	208, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:198,	
	and where b is greater than or equal to a + 14.	
828818	Preferably excluded from the present invention are	
040010	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	proceeding sequence described by the general	

	formula of a-b. where a is any integer between 1 to	
	244 of SEQ ID NO:199. b is an integer of 15 to	
	258, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:199,	
	and where b is greater than or equal to a + 14.	
828819	Preferably excluded from the present invention are	R28397, R35050, R82429,
	one or more polynucleotides comprising a	AA523252, AA541515, AA888589,
	nucleotide sequence described by the general	AA931260, AA969512, N90287
	formula of a-b. where a is any integer between 1 to	
	879 of SEQ ID NO:200, b is an integer of 15 to	
	893, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:200,	
	and where b is greater than or equal to a + 14.	
828820	Preferably excluded from the present invention are	
020020	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	489 of SEQ ID NO:201, b is an integer of 15 to	
	503. where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:201.	
	and where b is greater than or equal to $a + 14$.	
828821	Preferably excluded from the present invention are	
626621		
	one or more polynucleotides comprising a	
]	nucleotide sequence described by the general	
Ī	formula of a-b, where a is any integer between 1 to	
	424 of SEQ ID NO:202, b is an integer of 15 to	
	438, where both a and b correspond to the positions	
ļ	of nucleotide residues shown in SEQ ID NO:202,	
020022	and where b is greater than or equal to a + 14.	
828823	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	862 of SEQ ID NO:203, b is an integer of 15 to	
	876, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:203,	
02002	and where b is greater than or equal to a + 14.	
828824	Preferably excluded from the present invention are	T63961, R37805, R41200, R41200,
	one or more polynucleotides comprising a	H06703, H14569, N35284,
	nucleotide sequence described by the general	W84891, W84386, AA020009,
	formula of a-b, where a is any integer between 1 to	AA115923, AA191098, AA720881,
	1490 of SEQ ID NO:204, b is an integer of 15 to	AA825322, AA007194
	1504, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:204, and where b is greater than or equal to a +	
	14.	
828825		T90840. R97506, R97507, H56561,
		H90159, AA548594
	nucleotide sequence described by the general	İ
	formula of a-b. where a is any integer between 1 to	
	511 of SEQ ID NO:205, b is an integer of 15 to	
	525, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:205,	
	and where b is greater than or equal to a + 14.	
828826		R54121. H53524. H83780, N33845,
		AA150188, AA150364, AA193510,
		AA236206, AA236207, AA256878,
828826	Preferably excluded from the present invention are one or more polynucleotides comprising a	AA150188, AA150364, AA193510,
	mucleonide sequence described by the general	MA230200, AA230207, AA256878,

		
	formula of a-b, where a is any integer between 1 to 2480 of SEQ ID NO:206, b is an integer of 15 to	AA255472, AA292484, AA292485, AA514616, AA808712, AA812205
		MA314010, MA606712, MA612203
1	2494, where both a and b correspond to the	
1	positions of nucleotide residues shown in SEQ ID	
	NO:206. and where b is greater than or equal to a +	
	14.	
828829	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	866 of SEQ ID NO:207, b is an integer of 15 to	
	880, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:207,	
	and where b is greater than or equal to a + 14.	
828830	Preferably excluded from the present invention are	W47311
-	one or more polynucleotides comprising a	
İ	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
ł	626 of SEQ ID NO:208, b is an integer of 15 to	
	640, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:208.	
	and where b is greater than or equal to $a + 14$.	
828833	Preferably excluded from the present invention are	
020033	one or more polynucleotides comprising a	•
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	289 of SEQ ID NO:209, b is an integer of 15 to	
	303, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:209,	
020025	and where b is greater than or equal to a + 14.	
828835	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1154 of SEQ ID NO:210, b is an integer of 15 to	
	1168, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:210, and where b is greater than or equal to a +	
000000	14.	
828838	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	3119 of SEQ ID NO:211, b is an integer of 15 to	
	3133, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
1	NO:211, and where b is greater than or equal to a +	
000000	14.	
828840		T67663, N51807, N94795
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
1	formula of a-b, where a is any integer between 1 to	
	666 of SEQ ID NO:212, b is an integer of 15 to	
	680, where both a and b correspond to the positions	
1	of nucleotide residues shown in SEQ ID NO:212,	
	and where b is greater than or equal to a + 14.	
828845	Preferably excluded from the present invention are	AA278542

	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	549 of SEQ ID NO:213. b is an integer of 15 to	
	563, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:213,	
	and where b is greater than or equal to $a + 14$.	
929946		
828846	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2622 of SEQ ID NO:214, b is an integer of 15 to	
	2636, where both a and b correspond to the	
<u> </u>	positions of nucleotide residues shown in SEQ ID	
	NO:214, and where b is greater than or equal to a +	
	14.	
828847	Preferably excluded from the present invention are	
-	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	1808 of SEQ ID NO:215, b is an integer of 15 to	
	1822. where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:215. and where b is greater than or equal to a +	
020040	14.	
828849	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
ĺ	3113 of SEQ ID NO:216, b is an integer of 15 to	
	3127, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:216, and where b is greater than or equal to a +	
	14.	
828850	Preferably excluded from the present invention are	T89442, T89529, R00855, R01510,
	· · · · · · · · · · · · · · · · · · ·	R17037, R44677, R44677, W71999,
		W76568, AA028176, AA594435,
		AA630811, AA640365, AA570503,
		AA827402. AI001038
!	1529, where both a and b correspond to the	111027 102, 111001030
	positions of nucleotide residues shown in SEQ ID	
	NO:217, and where b is greater than or equal to a +	
	14.	
020052		NO.5101 N.51204 A 4.005.652
828852		N25191, N51394, AA085653
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1086 of SEQ ID NO:218, b is an integer of 15 to	
	1100, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:218, and where b is greater than or equal to a +	
	14.	
828853		T69893, R23246, R23322, R23610,
	•	R26164, R76851, R78355, R78356,
	· · · · · ·	W37071, AA281297, AA281298,
		AA287617, AA286726, AA830753.
	1778 of SEQ ID NO:219, b is an integer of 15 to	AA907191. AA937081

	1792, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:219, and where b is greater than or equal to a + 14.	
828857	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1296 of SEQ ID NO:220, b is an integer of 15 to 1310, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:220, and where b is greater than or equal to a + 14.	H87149. N29514, N32038. W49771. W69834, W69944, W69906. W70171. AA035645, AA262486, AA280793, AA280787, AA468735, AA470769, AA814845. AA877855, AA903806
828861	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1355 of SEQ ID NO:221, b is an integer of 15 to 1369, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:221, and where b is greater than or equal to a + 14.	
828866	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 778 of SEQ ID NO:222, b is an integer of 15 to 792, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:222, and where b is greater than or equal to a + 14.	R17863, H06471. AA157721
828872		R87888, R87900, R87908, N49168, AA931266
828874	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1965 of SEQ ID NO:224, b is an integer of 15 to 1979, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:224, and where b is greater than or equal to a + 14.	T87038, R70347, H39025, R91475, H57830, H59954, H62220, H62316, H65258, H65259, H95743, N54406, W25201, W32973, W69360, W69399, W84707, W90181, AA045489, AA058908, AA059484, AA126289, AA126390, AA127568, AA171412, AA171832, AA548030, AA593288, AA595330, AA622098, AA573531, AA574415, AA865443
828875 828877	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 527 of SEQ ID NO:225, b is an integer of 15 to 541, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:225, and where b is greater than or equal to a + 14. Preferably excluded from the present invention are	1 M. 2 / 2 - 2 2 1 1 2 1 2 1 2 1 2 2 2 2 2 2 2 2

ļ	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	263 of SEQ ID NO:226. b is an integer of 15 to	
	277, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:226,	
	and where b is greater than or equal to a + 14.	
828878	Preferably excluded from the present invention are	T66330, R26894, R27126, R69123,
	one or more polynucleotides comprising a	R69242, R82299, R82300, W07548,
	nucleotide sequence described by the general	W40127, W61081, W63740,
	formula of a-b, where a is any integer between 1 to	AA088736. AA088851. AA416637,
ļ	2055 of SEQ ID NO:227, b is an integer of 15 to	AA425692, AA587736, AA574419,
	2069, where both a and b correspond to the	AA659481, AA746137, AA827964,
	positions of nucleotide residues shown in SEQ ID	AA873416, AA876962, AA886118,
	NO:227, and where b is greater than or equal to a +	AA913307. W63541. AA091722
	14.	
828879	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	457 of SEQ ID NO:228, b is an integer of 15 to	
	471, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:228,	
	and where b is greater than or equal to a + 14.	
828881	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
Ì	formula of a-b, where a is any integer between 1 to	
	1626 of SEQ ID NO:229, b is an integer of 15 to	
	1640, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:229, and where b is greater than or equal to a +	
	14.	
828885	Preferably excluded from the present invention are	T66265, R00322, R05577, R14288,
		R40578, N35835, W67698,
	nucleotide sequence described by the general	W68707, AA226782, AA227401,
		AA917573, AI096970, C01407
	1956 of SEQ ID NO:230, b is an integer of 15 to	
	1970, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:230, and where b is greater than or equal to a +	
	14.	
828886	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
ĺ	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	296 of SEQ ID NO:231, b is an integer of 15 to	
	310. where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:231,	
000000	and where b is greater than or equal to a + 14.	
828887	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2819 of SEQ ID NO:232, b is an integer of 15 to	
	2833, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	

	NO:232, and where b is greater than or equal to a +	
020000	114.	11001001 1107761
828889	Preferably excluded from the present invention are	A1084904. N87764
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	678 of SEQ ID NO:233, b is an integer of 15 to	
	692. where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:233,	
	and where b is greater than or equal to a + 14.	
828891	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1339 of SEQ ID NO:234, b is an integer of 15 to	
	1353, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:234, and where b is greater than or equal to a +	
	14.	
828899	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	332 of SEQ ID NO:235, b is an integer of 15 to	
	346, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:235,	
	and where b is greater than or equal to a + 14.	
828907	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2257 of SEQ ID NO:236, b is an integer of 15 to	
	2271, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:236, and where b is greater than or equal to a +	
	14.	
828911	Preferably excluded from the present invention are	· · · · · · · · · · · · · · · · · · ·
020711	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between I to	
	3036 of SEQ ID NO:237, b is an integer of 15 to	
	3050, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:237, and where b is greater than or equal to a +	
	14.	
828914	Preferably excluded from the present invention are	
020714	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2788 of SEQ ID NO:238, b is an integer of 15 to	·
	2802, where both a and b correspond to the	
	positions of nucleotide residues shown in SEO ID	
	NO:238, and where b is greater than or equal to a +	
	1.	
828917	Professibly avaluded from the present invention are	T/9780 T/9700 T52400 T52400
04071/		T48789, T48790, T52689, T52690,
		T54143, T57627, T58981, T60334.
	nucleotide sequence described by the general	T63023, T63169, T64611, T68165.

formula of a-b. where a is any integer between 1 to T73770, T92858, R09683, R05784. 1523 of SEQ ID NO:239, b is an integer of 15 to R05870, R23705, R24243, R25436, 1537, where both a and b correspond to the R26263. R26661, R31482. R33617. positions of nucleotide residues shown in SEQ ID R52663. R54888, R55790, R63634. NO:239. and where b is greater than or equal to a + R64491, R65588, R66756, R74348. R74447, R77767, R77861, H24648. H24647, H25483, H25708, H25719. H30170, H39683, H42201, H50627. H61272, H74187, H73366, H84457. H96852, H97161, N21258, N24067. N25124, N25891, N32256, N35943. N39665, N59887, N74237, N75946, N77028, N91815, N94382, W01241, W04970, W16791, W31249, W37991, W42625, W42503, W42504, W45097, W46997, W47010, W47011. W47035, W58226, W60191. W74239, AA011342, AA011422. AA053421, AA053142, AA069730, AA069687, AA071401, AA079362, AA085841, AA088476, AA088867, AA099339, AA098900, AA099401, AA099509, AA099626, AA100481, AA111899, AA112344, AA128689, AA128504, AA130068, AA130069, AA133988, AA130205, AA134388, AA130699, AA131164, AA131119, AA135908, AA143614, AA148147, AA151655, AA151855, AA149710, AA150148, AA152217, AA150454, AA156656, AA156942, AA158064, AA158065, AA160927, AA167640, AA167760, AA173558, AA173723. AA188571, AA188806, AA188862. AA190996, AA191121, AA252461, AA286842, AA513431, AA523544, AA533369, AA534903, AA541751. AA548088, AA552311, AA563748, AA563790, AA564990, AA565005, AA588690, AA594295, AA600956, AA604061, AA604282, AA604810, AA614124, AA631612, AA632221, AA569331, AA573854, AA577627, AA579851, AA661566, AA689517, AA740358, AA740572, AA747358, AA768322, AA827032, AA831321, AA831490, AA862010, AA862071, AA872486, AA876655, AA878041, AA902900, AA907481, AA932203. AA976947, AA995848, AI005047, A1051152, A1053717, A1053913, A1053985, A1054236, F18795. D82560, W28635, W68223, C02865, C05961, C06214, C14019, AA641827, AA642221 828921 Preferably excluded from the present invention are

	one or more polynucleotides comprising a	<u> </u>
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
ļ	1320 of SEQ ID NO:240, b is an integer of 15 to	
	1334, where both a and b correspond to the	
1	positions of nucleotide residues shown in SEQ ID	
1	NO:240, and where b is greater than or equal to a +	
	14.	
828922	Preferably excluded from the present invention are	R14071, R40196, R40196, W78082,
	one or more polynucleotides comprising a	AA002041, AA001835, AA167058,
	nucleotide sequence described by the general	AA564814, AA604562, AA831678,
	formula of a-b. where a is any integer between 1 to	AA902298, AA922990, N88270
1	2424 of SEQ ID NO:241, b is an integer of 15 to	,
	2438, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:241, and where b is greater than or equal to a +	
	14.	
828924	Preferably excluded from the present invention are	
525724	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	125 of SEQ ID NO:242, b is an integer of 15 to	
	139, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:242, and where b is greater than or equal to a + 14.	
828925	Preferably excluded from the present invention are	
028923	1 2	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	465 of SEQ ID NO:243, b is an integer of 15 to	
	479, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:243,	
920026	and where b is greater than or equal to a + 14.	1 A 021229 A A 165240
828926		AA021328, AA165340
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	570 of SEQ ID NO:244, b is an integer of 15 to	
1	584, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:244,	
	and where b is greater than or equal to a + 14.	
828928	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
1	formula of a-b, where a is any integer between 1 to	
	318 of SEQ ID NO:245, b is an integer of 15 to	
	332, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:245,	
	and where b is greater than or equal to a + 14.	
828930		R 13197, R22953, R23059, R34735,
	one or more polynucleotides comprising a	H16860, H17441, H30722, H96486,
	nucleotide sequence described by the general	H98091, N25031, N26040,
	1	W37582, W74506, W73933,
		W79218, W79053, AA017108,
		AA02 7 970, AA027971, AA058997,
		AA223857, AA468648, AA506695,
		AA513402, AA627542, AA627543,

	14.	AA687974, AA748356, AA749265,
1		AA766155. AA769265, AA810698.
		AA810803, AA811177, AA813864.
		AA815128, AA837374, AA907206.
		AA907432, AA911140, AA911319,
		AA989380, AI088862, N85247
828935	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1435 of SEQ ID NO:247, b is an integer of 15 to	
	1449, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:247, and where b is greater than or equal to a +	
	14.	
828937	Preferably excluded from the present invention are	T78834, T78835, T99250, T99297,
1	one or more polynucleotides comprising a	R12511, T26404, R37406, R41280.
	nucleotide sequence described by the general	R41370, R41371, R52358, R52359.
	formula of a-b. where a is any integer between 1 to	R41280. R41370, R41371. R81208.
	1470 of SEQ ID NO:248, b is an integer of 15 to	R81320, R82778, H44863, H54693,
	1484, where both a and b correspond to the	H54584, H71670, H72234, H79199,
	positions of nucleotide residues shown in SEQ ID	H80064. H80065, H90038, H90715,
	NO:248, and where b is greater than or equal to a +	H96868, H96874, H98754, N20017,
	14.	N21625, N23354, N28826, N28864,
		N31950, N33092. N35337, N35930,
		N36772, N44708, N59759, N63774,
		N64419, N70550, N73583, N75550,
		N78219, N78798, N92686, N93067,
		W06846, W07226, W32114,
		W32172, W35376, W38996.
		W39688, W45043, W55883,
		W55882, W58545, W58627,
		W68228, W78990, W80596,
		W87464, N91505, AA026436,
İ		AA062585, AA112289, AA127552,
		AA127553, AA171942, AA172148,
		AA224492, AA279390, AA505278,
		AA505337, AA527368, AA531405,
İ		AA532853, AA534544, AA535699,
1		AA582848, AA587609, AA568827,
		AA635925, AA576357, AA576891,
1		AA579716, AA565856, AA687556,
		AA736748, AA877644, AA885760,
		AA917890, AA918826, AA938647,
		AA953594, AA971036, AA973846,
		AA976240, AA976836, AA948139,
		AI086410, W01797, N86155,
İ		N86407, AA026382, AA092135,
		AA093922, AA094184
828940	Preferably excluded from the present invention are	T61139, H60808, H66215, H86154,
	one or more polynucleotides comprising a	H86598, N66951, AA045564,
	nucleotide sequence described by the general	AA053520, AA054053, AA054010,
	formula of a-b, where a is any integer between 1 to	AA055556, AA055592, AA055887.
	2408 of SEQ ID NO:249, b is an integer of 15 to	AA085899, AA088546, AA100472,
	2422, where both a and b correspond to the	AA102305, AA100774, AA115726,
	positions of nucleotide residues shown in SEQ ID	AA115790, AA130430, AA130456,
	NO:249, and where b is greater than or equal to a +	AA134504, AA130756, AA132265,

	14.	AA134988. AA135921. AA143560.
		AA143592. AA146693. AA146644.
		AA146790, AA152341. AA149726.
		AA149780, AA152003, AA157705,
		AA157715. AA157718. AA157719,
		AA157730. AA180379. AA226737.
		AA227302. AA527374. C05254
828942	Preferably excluded from the present invention are	H51878
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	1
	560 of SEQ ID NO:250, b is an integer of 15 to	
	574, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:250.	
	and where b is greater than or equal to a + 14.	
828943	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1030 of SEQ ID NO:251, b is an integer of 15 to	
	1044, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:251, and where b is greater than or equal to a +	
	14.	
828946	Preferably excluded from the present invention are	H49140, H50139, N91808.
	one or more polynucleotides comprising a	W17361, W23877, W25195,
	nucleotide sequence described by the general	W31242, AA116089, AA116090,
	formula of a-b, where a is any integer between 1 to	AA150544, AA150853, AA417973.
	1015 of SEQ ID NO:252, b is an integer of 15 to	AA418133, AA279993. AA280052,
	1029, where both a and b correspond to the	AA583751, AA587199, AA618421.
	positions of nucleotide residues shown in SEQ ID	AA814427, AA830028, AA916097,
	NO:252, and where b is greater than or equal to a +	AA961686, AA974254, AA987758,
	14.	A1083878, A1085516, N94820,
000045		N95456
828947	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	461 of SEQ ID NO:253, b is an integer of 15 to	
	475, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:253,	
929054	and where b is greater than or equal to a + 14.	T90047 T90202 H22904 N22224
828956		T80047, T80393, H22804, N33236,
	one or more polynucleotides comprising a	W55892, AA043830, AA062632,
		AA069280, AA078770, AA082403,
	formula of a-b, where a is any integer between 1 to 1710 of SEQ ID NO:254, b is an integer of 15 to	AA101062, AA459984, AA460077,
		AA501353, AA535081, AA588749,
	1724, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID	AA577376, AA814781, AA836428, AA876439, AA916459, AA938494
	NO:254, and where b is greater than or equal to a +	mao /0432, maz 10432, maz 38494
929050	Professibly evaluated from the present invention are	
828958	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	292 of SEQ ID NO:255, b is an integer of 15 to	
	306, where both a and b correspond to the positions	

·	of nucleotide residues shown in SEQ ID NO:255.	
828965	and where b is greater than or equal to a + 14.	T(0300 B07403 B07543 B03(60
828963	Preferably excluded from the present invention are one or more polynucleotides comprising a	T60299. R07493. R02543. R02660.
	nucleotide sequence described by the general	N23126, N26234, N28744, N80029, N92370, W06992, W24565,
i	formula of a-b. where a is any integer between 1 to	W56160, AA058766, AA082121.
	876 of SEQ ID NO:256, b is an integer of 15 to	AA102497, AA133193, AA157043.
	890. where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:256.	AA428256, AA522732, AA531204,
	and where b is greater than or equal to a + 14.	AA588687, AA622529, AA631698,
		AA687351, AA736613, AA736615.
		AA743076, AA805965, AA825789.
		AA873396, AA934548, AA984002
828969	Preferably excluded from the present invention are	R34277, R35477, R40127, R40127,
	one or more polynucleotides comprising a	R56401, R63536, R63587, R68336,
	nucleotide sequence described by the general	R68415, R68416, R68428, R68429,
	formula of a-b, where a is any integer between 1 to	R72408, R72447, R75996, R76825,
	1145 of SEQ ID NO:257. b is an integer of 15 to	H00671. H00761, H00909, H00910,
	1159, where both a and b correspond to the	H06173, H06437, H67367, H67416,
	positions of nucleotide residues shown in SEQ ID	H95558, N21675, N22870, N27226,
	NO:257, and where b is greater than or equal to a +	N30906, N34567, N56770, N62120,
	14.	N72850, N91825, W03069,
		W31262, W70204, W75946,
		AA009777, AA009498, AA081398,
		AA081947, AA082173, AA082577,
		AA101142, AA102573, AA102587,
		AA159158, AA279295, AA279321,
		AA587132, AA576939, AA720862,
		AA748173, AA808533, AA878214,
		AA962702, AA987447, AA987635,
		AA989319, AA995406, AI031632, N84444, AI097592, C02910,
		C14651, AA081397, C15440
828971	Preferably excluded from the present invention are	
020717	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	741 of SEQ ID NO:258, b is an integer of 15 to	1
	755, where both a and b correspond to the positions	
ŀ	of nucleotide residues shown in SEQ ID NO:258,	
	and where b is greater than or equal to a + 14.	
828973	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	İ
	nucleotide sequence described by the general	:
	formula of a-b, where a is any integer between 1 to	
	700 of SEQ ID NO:259, b is an integer of 15 to	
	714, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:259,	
828980	and where b is greater than or equal to a + 14.	AA171806, AA223318
020700	Preferably excluded from the present invention are one or more polynucleotides comprising a	MAI/1000, MAZZ3318
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	511 of SEQ ID NO:260, b is an integer of 15 to	
	525, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:260,	
	and where b is greater than or equal to $a + 14$.	
	and a second ment of education . 1.1.	

828984	Preferably excluded from the present invention are	T80804, T81207. R66564, R79533,
020704	one or more polynucleotides comprising a	H10212, H10266, N47700, N47701.
	nucleotide sequence described by the general	N47714, N47715. W92453,
İ	formula of a-b. where a is any integer between 1 to	W92454, AA047175, AA057046.
	2986 of SEQ ID NO:261, b is an integer of 15 to	AA084865, AA084994, AA085435.
	3000, where both a and b correspond to the	AA088196, AA088369, AA102606.
	positions of nucleotide residues shown in SEQ ID	AA102637, AA102681, AA129398,
	NO:261, and where b is greater than or equal to a +	AA129437, AA133824, AA133835,
	14.	AA134870, AA155636, AA155692.
		AA173150, AA173277, AA181676.
		AA172185, AA187844, AA188417,
1		AA188720, AA203343, AA223606.
		AA223765, AA232539, AA253486,
		AA258817, AA258912, AA418911.
		AA426576, AA428207, AA282012,
		AA282185, AA506517, AA581113,
		AA640599, AA864428, AA872063.
1		AA928645, AA947052, AA983384. W28603. AA640958
828985	Preferably excluded from the present invention are	W 2000J, MAU 1 07J0
520,05	one or more polynucleotides comprising a	
1	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
1	952 of SEQ ID NO:262, b is an integer of 15 to	
	966, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:262,	
	and where b is greater than or equal to a + 14.	
828988	Preferably excluded from the present invention are	T73414, R12106, T66627, T66628,
	one or more polynucleotides comprising a	T78284, R16041, R16042, R36860,
	nucleotide sequence described by the general	R37936, R61426, R63310, H40110,
		H40174, N25567. N30486, N34167,
	2724 of SEQ ID NO:263, b is an integer of 15 to 2738, where both a and b correspond to the	N44865, N52758, N57579, N68031, W04668, W31769, W32476,
	positions of nucleotide residues shown in SEQ ID	W32662, AA029481. AA029545,
	F The state of the	AA215402, AA278628, AA278627,
	-	AA282001, AA483843, AA576431.
		AA659932, AA749063, AA768638,
		AA768824, AA809759, AA830249,
		N83750, A1097104
828993	Preferably excluded from the present invention are	
1	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1506 of SEQ ID NO:264, b is an integer of 15 to	
	1520, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID	
	NO:264, and where b is greater than or equal to a +	
	14.	
828995	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	1554 of SEQ ID NO:265, b is an integer of 15 to	
	1568, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:265, and where b is greater than or equal to a +	
L	14.	

829000	Preferably excluded from the present invention are	T84984, H62305, N94075
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
ĺ	formula of a-b, where a is any integer between 1 to	
	531 of SEQ ID NO:266, b is an integer of 15 to	
	545, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:266.	
920005	and where b is greater than or equal to a + 14.	T01047 D01000 D40450 H00470
829005	Preferably excluded from the present invention are	T81847, R31803, R63658, H80178,
ļ	one or more polynucleotides comprising a	AA086064. AA730231, AA805602,
	nucleotide sequence described by the general	N84214, AA091994
	formula of a-b, where a is any integer between 1 to	
	748 of SEQ ID NO:267, b is an integer of 15 to	
	762, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:267,	
	and where b is greater than or equal to a + 14.	
829009	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1419 of SEQ ID NO:268, b is an integer of 15 to	
	1433, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:268, and where b is greater than or equal to a +	
	14.	
829010	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
İ	2264 of SEQ ID NO:269, b is an integer of 15 to	
	2278, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:269, and where b is greater than or equal to a +	
	14.	
829012		T46094 T46095 T60215 T60240
029012		T46984, T46985, T60315, T60340.
	one or more polynucleotides comprising a	T91262, T82866, T85699, R18936.
		R22449, R22501, R44051, R44051,
		R62350, R62351, R62967, R63021,
		R67538, R67539, H00265, H00266,
		H05754, H05861, H17661, H17778,
	positions of nucleotide residues shown in SEQ ID	H37895, R84704, R85663, R85705,
	NO:270, and where b is greater than or equal to a +	R92774, H71754, H86241, H86596,
		N77995, N94481, W23930,
		W33005, W42716, W42804,
		W42856, W42911, W48687,
!		W48688, W51894, W60144,
		AA013165, AA013166, AA016027,
		AA016116, AA019160, AA019173,
		AA019737, AA019781, AA019874,
		AA019940, AA020855, AA021014,
		AA039946. AA039812, AA044966.
		AA059316, AA059332, AA062810,
		AA069688, AA074166, AA074690,
		AA074819, AA079227, AA086267,
		AA085941, AA101899, AA111855,
		AA112207, AA112317, AA113083,
		AA113110. AA112379, AA128454.
	<u> </u>	



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		AA129184, AA134373, AA134374,
		AA147440, AA147441, AA147468,
		AA147469, AA152007, AA182029,
		AA188388, AA193685, AA514744,
		AA525480, AA553895, AA559119.
		AA580724, AA595036, AA600916,
		AA601895. AA602350. AA631450.
		AA633022. AA640333. AA580604,
1		AA715813. AA806865, AA808711.
ł		AA811858, AA833843, AA862552,
		AA873179, AA878958, AA887089,
		AA918330, AA922879, AA937320,
		AA977779, AA987809, AA991856,
		AA999930, AI081179, W28427,
		į.
829013	Descending avalated from the second investigation	N86448, AA640960, AA641152
829013	Preferably excluded from the present invention are	R12986, R32825, R32839, R32927,
	one or more polynucleotides comprising a	R32942, R40183, R52946, R53730,
	nucleotide sequence described by the general	R40183, R66041, H98989, N52010,
	formula of a-b, where a is any integer between 1 to	N54624, N66635, AA046243,
	1604 of SEQ ID NO:271, b is an integer of 15 to	AA149949, AA253362, AA253485,
	1618, where both a and b correspond to the	AA258773, AA257971, AA262281,
	positions of nucleotide residues shown in SEQ ID	AA422167, AA262911, AA513150,
	NO:271, and where b is greater than or equal to a +	AA687117, AA687257, AA747442,
	14.	AA748820, AA749108, AA767245,
		AA806305, AA811958, AA903407,
		AA937560, AA938330, AA976840,
<u> </u>		AA094074
829019	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	456 of SEQ ID NO:272, b is an integer of 15 to	
	470, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:272,	
	and where b is greater than or equal to a + 14.	
829020	Preferably excluded from the present invention are	AA136693, AA136791, AA233217,
	one or more polynucleotides comprising a	AA419607
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	969 of SEQ ID NO:273, b is an integer of 15 to	
	983, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:273,	
	and where b is greater than or equal to a + 14.	
829021	Preferably excluded from the present invention are	T94357, T94712, R12024, R12980,
		R37092, R40178, R40178, H06066,
		H13404, N70651, W06945.
		N90742, AA071520, AA082342,
		AA086292. AA111847. AA508760, [
		AA513083, AA513134, AA975983,
	positions of nucleotide residues shown in SEQ ID	AA987297, N86943
	NO:274, and where b is greater than or equal to a +	
	14.	
		R46780, R56425, H14131, H14048.
		H19990, H44884, W73060,
		W76648, AA258220. AA732283,
		AA732519, AA748619. AA768036.
	1362 of SEQ ID NO:275, b is an integer of 15 to	AA830813

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	1376, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:275, and where b is greater than or equal to a + 14.	
829030	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2580 of SEQ ID NO:276, b is an integer of 15 to	
	2594, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:276, and where b is greater than or equal to a +	
	14.	
829035	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	665 of SEQ ID NO:277, b is an integer of 15 to	
	679, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:277,	
	and where b is greater than or equal to a + 14.	
829041	Preferably excluded from the present invention are	T64828, R13411, R40922, H17358,
	one or more polynucleotides comprising a	AA829407, AA991316
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1464 of SEQ ID NO:278, b is an integer of 15 to	
	1478, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:278, and where b is greater than or equal to a +	
	14.	
829045		R94934, R95018, R96941, R96998,
		N62469, N79188, AA056180,
		AA079122, AA079223, AA190398,
		AA190542, AA279989, AA280050,
		AA563719. AA563967, AA621823,
		AA639374, AA743441, AA809943,
		AA903777, AA991450, AA091152
	NO:279, and where b is greater than or equal to a + 114.	
829048	Preferably excluded from the present invention are	
027040	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1679 of SEQ ID NO:280, b is an integer of 15 to	
	1693, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
829051		
		·
	of nucleotide residues shown in SEQ ID NO:281,	
	1	
	and where b is greater than or equal to a + 14.	
829051	NO:280, and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 244 of SEQ ID NO:281. b is an integer of 15 to 258, where both a and b correspond to the positions	

	one or more polynucleotides comprising a	H30486. R83722, N24879, N34365.
	nucleotide sequence described by the general	N36398. W80812, W80905.
	formula of a-b, where a is any integer between 1 to	AA040726, AA040725, AA069816.
	1750 of SEQ ID NO:282, b is an integer of 15 to	AA099148. AA099246. AA130358.
	1764. where both a and b correspond to the	AA131274. AA143111. AA150578.
	positions of nucleotide residues shown in SEQ ID	AA553644. H89452, AA570403.
	NO:282. and where b is greater than or equal to a +	AA985591. A1076032. AA092873
	14.	AA963391. A1070032. AA092873
829057		R17092
029037	Preferably excluded from the present invention are	R17092
	one or more polynucleotides comprising a	
-	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	785 of SEQ ID NO:283. b is an integer of 15 to	
	799, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:283,	
<u>.</u>	and where b is greater than or equal to a + 14.	
829058	Preferably excluded from the present invention are	†
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1475 of SEQ ID NO:284, b is an integer of 15 to	
	1489, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:284, and where b is greater than or equal to a +	
	14.	
829059	Preferably excluded from the present invention are	T99023, R54176, H73053, H72832,
027037	one or more polynucleotides comprising a	H73054, H80706, AA988806
	nucleotide sequence described by the general	1173034; 1180700; AA388800
	formula of a-b. where a is any integer between 1 to	
	688 of SEQ ID NO:285, b is an integer of 15 to	
	702, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:285,	
222261	and where b is greater than or equal to a + 14.	
829061	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	·
	formula of a-b, where a is any integer between 1 to	
	1161 of SEQ ID NO:286, b is an integer of 15 to	
	1175, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:286, and where b is greater than or equal to a +	
	14.	
829062	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2859 of SEQ ID NO:287, b is an integer of 15 to	
	2873. where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:287, and where b is greater than or equal to a +	
	14.	
829063		T56853 D13436 D40020 D40020
027007		T56853, R13426, R40938, R40938,
		R56447. H64343. W94129.
		W94024, W95653, W95654,
		AA001812, AA158586, AA158585,
		AA179917, AA463947, AA464082,
	2104. where both a and b correspond to the	AA421875. AA430503. AA430622.

	positions of nucleotide residues shown in SEQ ID	AA228990. AA506167. AA528459.
		AA551350. AA564494, AA601544.
	14.	AA604335, AA622270, AA747745.
		AA760947. AA827325. AA888125.
		AA910238
829064	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between I to	
	1237 of SEQ ID NO:289, b is an integer of 15 to	
	1251, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:289, and where b is greater than or equal to a +	
220044	14.	
829066	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1577 of SEQ ID NO:290, b is an integer of 15 to	
	1591, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:290, and where b is greater than or equal to a + 14.	
829068	Preferably excluded from the present invention are	
829008	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2372 of SEQ ID NO:291, b is an integer of 15 to 2386, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:291, and where b is greater than or equal to a + 14.	
829069	······································	AA056484, AA056650, AA742863
027007	one or more polynucleotides comprising a	MOSOHOH, MAOSOOSO, AA742805
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	969 of SEQ ID NO:292, b is an integer of 15 to	
	983, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:292,	
	and where b is greater than or equal to $a + 14$.	
829074	Preferably excluded from the present invention are	R21643, R21965, R23012, R31285
		R31896, R32700, R32701, R34083,
		R62210, R64591, R68873, R73888,
	,	R73975, R74184, R74270, R76839,
	• -	R77200, R77720, R78052, H03147,
	1	H03956, H15807, H16106, H39711,
		H39732, H42156. R98951, N41769,
		W87673, AA007438, AA007439,
		AA013075, AA099593, AA156625,
		AA195656, AA195769, AA236849,
		AA237048, AA226078, AA526030,
		AA570236, AA570252, AA766062,
		AA767497, AA769581, AA827847.
		AA831416. AA911414. AA938690
829077		R11694, AA031610. AA056352,
	one or more polynucleotides comprising a	AA099809, AA190527
	nucleotide sequence described by the general	
L	nucleotide sequence described by the general	

_	formula of a-b, where a is any integer between 1 to	
	1724 of SEQ ID NO:294, b is an integer of 15 to	
	1738, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:294, and where b is greater than or equal to a +	
	14.	
829078	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1006 of SEQ ID NO:295, b is an integer of 15 to	
	1020, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:295, and where b is greater than or equal to a +	
	14.	
829079	Preferably excluded from the present invention are	AA613454
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	670 of SEQ ID NO:296, b is an integer of 15 to	
	684, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:296,	
	and where b is greater than or equal to a + 14.	
829085	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1824 of SEQ ID NO:297, b is an integer of 15 to	
	1838, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:297, and where b is greater than or equal to a +	
	14.	
829093	Preferably excluded from the present invention are	T86751, N67573, AA084170,
		AA482701, AA513177, AA715379
<u> </u>	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	1621 of SEQ ID NO:298, b is an integer of 15 to	
	1635, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:298, and where b is greater than or equal to a +	
820000	14.	A 4 2 2 5 0 0 0 A 4 5 2 4 0 7 4 A 4 4 7 0 0 7 7 0
829099		AA235899, AA524874, AA588559,
		AA568363, C18296
	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to	
•		
ŀ	854 of SEQ ID NO:299, b is an integer of 15 to 868, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:299,	
829101	and where b is greater than or equal to a + 14.	N28457
027101		1 C+04)
	one or more polynucleotides comprising a nucleotide sequence described by the general	
İ	formula of a-b, where a is any integer between 1 to	
	533 of SEQ ID NO:300, b is an integer of 15 to	
	547, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:300,	
L	and where b is greater than or equal to a + 14.	

		11.
1 1	ded from the present invention are	N24654. N35441, N72250.
	nucleotides comprising a	W00539. W44692, AA101155.
	nce described by the general	AA491668, Al054009, Al054199.
	here a is any integer between 1 to	W38644
	IO:301, b is an integer of 15 to	
	a and b correspond to the positions	
1	idues shown in SEQ ID NO:301.	
	eater than or equal to a ÷ 14.	
	ded from the present invention are	R34801, N36324, D81161, D81435,
	nucleotides comprising a	C15688, C15742
	nce described by the general	
	here a is any integer between 1 to	
	IO:302, b is an integer of 15 to	
	a and b correspond to the positions	
	idues shown in SEQ ID NO:302.	
	eater than or equal to a + 14.	
	ded from the present invention are	R08917. R09023. T95465. R07005,
	nucleotides comprising a	R19551, R37796, R43901, R43901,
	nce described by the general	R65802, R65897, R77267, R77316.
	there a is any integer between 1 to	R82856, R82857, H15156, H15216,
	NO:303, b is an integer of 15 to	R93133, H77582, H77583, N45210.
	a and b correspond to the	N50021, N55569, N58316, N59861,
	eotide residues shown in SEQ ID	N59869. N76954. N77681. N93112.
1	ere b is greater than or equal to a +	W38788, W52631, AA011659,
14.		AA011707, AA043405, AA133302,
		AA133248, AA134238, AA134239.
		AA150954. AA151044. AA459974,
		AA460066, AA503364, AA522740,
		AA522866, AA523791, AA602932,
		AA602716, AA876807, AA877039,
1		AA879223, AA923007, AA935208,
		A1082642. A1094830
	led from the present invention are	
	nucleotides comprising a	
	nce described by the general	
	there a is any integer between 1 to	
	O:304, b is an integer of 15 to	
	and b correspond to the positions	
	dues shown in SEQ ID NO:304,	
	eater than or equal to a + 14.	
	led from the present invention are	
	nucleotides comprising a	
	nce described by the general	
	here a is any integer between 1 to	
	O:305, b is an integer of 15 to	
l P	and b correspond to the positions	
	dues shown in SEQ ID NO:305,	
	eater than or equal to a + 14.	1 1 0 0 1 0 7 1 1 1 1 0 7 0 7 0 7 0 7 0
	led from the present invention are	AA064674, AA078775
	nucleotides comprising a	
	nce described by the general	
	here a is any integer between I to	
1	O:306, b is an integer of 15 to	
	and b correspond to the positions	
of nucleotide resi		
	dues shown in SEQ ID NO:306.	
and where b is gre	dues shown in SEQ ID NO:306. eater than or equal to a + 14. led from the present invention are	

	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	382 of SEQ ID NO:307, b is an integer of 15 to	
	396. where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:307.	
	and where b is greater than or equal to a + 14.	
829119	Preferably excluded from the present invention are	T51849, T51895, R31503, H89196.
	one or more polynucleotides comprising a	W94076. AA233517, AA557320.
	nucleotide sequence described by the general	AA582238, AA604556, AA659141
	formula of a-b, where a is any integer between 1 to	1 1 1 3 5 2 2 3 5 , 1 1 1 3 5 6 , 1 1 1 6 3 5 7 1 1
	535 of SEQ ID NO:308. b is an integer of 15 to	
	549, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:308.	
	and where b is greater than or equal to a + 14.	
829120	Preferably excluded from the present invention are	
029120	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	1764 of SEQ ID NO:309, b is an integer of 15 to	
	1778, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:309, and where b is greater than or equal to a +	
	14.	
829121	Preferably excluded from the present invention are	[T79424, T86294, T98674, R00295,
		R41707. R42706, R45491. R46655,
		R41707, R42706, R45491, R46655,
1	· -	R56768. R71860. R71861, H17970.
1		N55536, N80100, W46264,
		W46265, W46263, W72406,
	of nucleotide residues shown in SEQ ID NO:310,	W73710. W76436, AA133997.
	and where b is greater than or equal to a + 14.	AA470389, AA514398, AA524707,
		AA536170, F15823, AA731228.
•		AA766110, AA825368, AA828215,
		AA833768, AA837103, AA918015,
		AA988068, AA999844, W46262,
		C04804, AA062584, AA082539
829123	Preferably excluded from the present invention are	T53735, T53833, T73419, T79418,
	one or more polynucleotides comprising a	T79419, AA035245, AA530898,
		AA588281, AA631068, C01039
	formula of a-b, where a is any integer between 1 to	
	1405 of SEQ ID NO:311, b is an integer of 15 to	
	1419, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:311, and where b is greater than or equal to a +	
	14.	
829126	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	512 of SEQ ID NO:312, b is an integer of 15 to	
	526, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:312.	
	and where b is greater than or equal to a + 14.	
829135	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	production described by the general	

220124	formula of a-b, where a is any integer between 1 to 2421 of SEQ ID NO:313, b is an integer of 15 to 2435, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:313, and where b is greater than or equal to a + 14.	
829136	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 2529 of SEQ ID NO:314, b is an integer of 15 to 2543, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:314, and where b is greater than or equal to a + 14.	N24451. N54675. AA135096. AA164383. AA180531. AA180520. AA179618. AA180509, C17250
829138	814 of SEQ ID NO:315, b is an integer of 15 to 828, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:315, and where b is greater than or equal to a + 14.	T57569. T86491. R00162. R00163. R91950. R92281. R93566, R93567, R98556. R98557. H82687. N23234. N23249. N27394. N40804. N52001. N54610, N62258. N69979. N79347. N98581. N98559. W24241. W30694, W39016. W49542, W49773, W93332. W95036, N90230, AA015762. AA022871, AA022872. AA151308, AA151309. AA203551. AA461104, AA424178, AA424202, AA467853, AA467908, AA513455, AA564159. AA576516, AA579461, AA740779, AA865373, AA938596. AA972781, AA641536, AA092083
829142	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1594 of SEQ ID NO:316, b is an integer of 15 to 1608, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:316, and where b is greater than or equal to a + 14.	
829148	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1043 of SEQ ID NO:317, b is an integer of 15 to 1057, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:317, and where b is greater than or equal to a + 14.	T70817, H97087. N28699, N59032, W31740, W63702
829149	one or more polynucleotides comprising a	T57875, AA062633, AA180493, AA255651, AA815168, AA827196, AA988896, AI032193

1		
	14	
829156	Preferably excluded from the present invention are	
1	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	482 of SEQ ID NO:319, b is an integer of 15 to	
	496, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:319.	
	and where b is greater than or equal to $a + 14$.	
829162		W28213. C20991
029102		W 20213. C20991
ł	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1742 of SEQ ID NO:320, b is an integer of 15 to	
	1756. where both a and b correspond to the	
1	positions of nucleotide residues shown in SEQ ID	
	NO:320, and where b is greater than or equal to a +	•
	14.	
829170	Preferably excluded from the present invention are	T54688
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	574 of SEQ ID NO:321, b is an integer of 15 to	
	588, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:321.	
	and where b is greater than or equal to $a + 14$.	
829177	Preferably excluded from the present invention are	
023177	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	•
	formula of a-b, where a is any integer between 1 to	
	724 of SEQ ID NO.322, b is an integer of 15 to	
	738, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:322,	
	and where b is greater than or equal to a + 14.	
829179	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
Ì	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	862 of SEQ ID NO:323, b is an integer of 15 to	
	876, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:323,	
	and where b is greater than or equal to a + 14.	
829184	Preferably excluded from the present invention are	
İ	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1308 of SEQ ID NO:324, b is an integer of 15 to	
	1322, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:324, and where b is greater than or equal to a +	
	14.	
829185	Preferably excluded from the present invention are	
027103	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	328 of SEQ ID NO:325, b is an integer of 15 to	
	342. where both a and b correspond to the positions	

	6 -1-64 -14 -1 - CEO ID NO 225	Ti and the same of
	of nucleotide residues shown in SEQ ID NO:325.	
220100	and where b is greater than or equal to a + 14.	T-04-52 T-50-702 T-72-14
829188	Preferably excluded from the present invention are one or more polynucleotides comprising a	T58653, T58703, T75221, T77245, T77461, R09770, R10874, R10923,
	nucleotide sequence described by the general	T78618. R05603. R12362. R13912.
	formula of a-b, where a is any integer between 1 to	R23445, R26046, R37744, R39442.
	3676 of SEQ ID NO:326, b is an integer of 15 to 3690, where both a and b correspond to the	R43682, R44004, R43682, R44004,
	positions of nucleotide residues shown in SEQ ID	H27016. H50941, H51605. H52497.
		N23353. N28825, N35021, N45029, N52865. N93751, N94155,
	NO:326, and where b is greater than or equal to a + 14.	W67224, W67334, W78117,
	1 4.	W79824, W94552, W92625,
		AA036842, AA040393, AA040497.
		AA074284, AA075940, AA135258.
		AA157449. AA159938. AA188822.
		AA188883, AA223533, AA280881,
		AA280961, AA515694, AA573708.
		AA720966, AA730134, AA761564,
		AA805432, AA826208, AA831736,
		AA833940, AA834312, AA888244.
		AA911536, AA918643, AA922815.
		AA932119. AA933022
829190	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	705 of SEQ ID NO:327, b is an integer of 15 to	
	719. where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:327,	
	and where b is greater than or equal to a + 14.	
829193	Preferably excluded from the present invention are	AA043829
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	975 of SEQ ID NO:328, b is an integer of 15 to	
	989, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:328,	
	and where b is greater than or equal to a + 14.	
829196	Preferably excluded from the present invention are	AA156138
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	420 of SEQ ID NO:329, b is an integer of 15 to	
	434, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:329,	
02010=	and where b is greater than or equal to a + 14.	712055
829197		R 13055
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	682 of SEQ ID NO:330. b is an integer of 15 to	
	696, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:330.	
920202	and where b is greater than or equal to a + 14.	
829202	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	

	formula of a-b. where a is any integer between 1 to	
	527 of SEQ ID NO:331, b is an integer of 15 to	
	541, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:331.	
	and where b is greater than or equal to a + 14.	
829203	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
Ì	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	291 of SEQ ID NO:332. b is an integer of 15 to	
	305, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:332,	
1	and where b is greater than or equal to a + 14.	
829209		H96926
	one or more polynucleotides comprising a	
İ	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	431 of SEQ ID NO:333, b is an integer of 15 to	
1	445, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:333,	
	and where b is greater than or equal to a + 14.	
829210	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	303 of SEQ ID NO:334, b is an integer of 15 to	
	317, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:334,	
	and where b is greater than or equal to a + 14.	
829214		T65464, T65607, T65616, R68318,
	one or more polynucleotides comprising a	R81279, H19079, H21595,
	nucleotide sequence described by the general	W38816, AA173621, AA195611,
	formula of a-b, where a is any integer between 1 to	AA461025, AA429991. AA281779,
	1510 of SEQ ID NO:335, b is an integer of 15 to	AA523034
	1524, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:335, and where b is greater than or equal to a +	
	14.	
829215	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	292 of SEQ ID NO:336, b is an integer of 15 to	
	306, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:336,	[
	and where b is greater than or equal to $a + 14$.	
829219	Preferably excluded from the present invention are	
1	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
I	formula of a-b, where a is any integer between 1 to	
	277 of SEQ ID NO:337, b is an integer of 15 to	
	291, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:337,	
	and where b is greater than or equal to a + 14.	
829220		T91056, R08770, R10337, T85922,
		R08771. N30353. N33349, N34024.
	nucleotide sequence described by the general	N36835. N43012. N46055. N46938.

	formula of a-b. where a is any integer between 1 to	N47028. N48163. N53309. N55453.
	1250 of SEQ ID NO:338, b is an integer of 15 to 1264, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:338, and where b is greater than or equal to a + 14.	N57768. N59733. N62846. N70614. N76825. N77753. W04936, W46253. W57556. W80670. W88648. AA081410. AA233146, AA251750. AA485043. AA554001. AA628055. AA632073. AA632104, AA576915. AA814024. AA829780. AA887202. AA902514, AA927412, AI056152. AI085313. AI084094
829222	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 745 of SEQ ID NO:339. b is an integer of 15 to 759, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:339, and where b is greater than or equal to a + 14.	T53949, T55484, T55410, N57462, N93015, W21365, W88723, AA025365, AA081355, AA081356, AA418410, AA418507, AA422027, AA593855, AA593915, AA639807, AA814928, AA833745, AA872346, AA887280, AA904054, AA090282
829223	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2625 of SEQ ID NO:340, b is an integer of 15 to 2639, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:340, and where b is greater than or equal to a + 14.	T39922. N73780. N74186. N99401. W49823. AA026960. AA028073. AA418303. AA418345. AA425606, AA425545. AA426176. AA279347, AA492172. AA587366. AA621961, AA621973. AA834751. AA641513
829225	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1810 of SEQ ID NO:341, b is an integer of 15 to 1824, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:341, and where b is greater than or equal to a + 14.	T64318, T65668, AA016241, AA173963, AA618544
829226	one or more polynucleotides comprising a mucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 4517 of SEQ ID NO:342, b is an integer of 15 to 4531, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:342, and where b is greater than or equal to a + 14.	R17300, R31023, R61393, R61438, R61703, R61704, R72584, R72589, R74189, R74276, R78679, H20944, H22649, H39794, R84924, H79108, H79109, H81746, H81747, N32103, N38733, N45414, N47287, N47868, N48370, N48604, N50820, N51222, W19758, W38435, W44825, W74326, AA031730, AA045438, AA046531, AA047110, AA047266, AA148821, AA150421, AA169649, AA169829, AA169806, AA169813, AA171644, AA171651, AA227734, AA228119, AA255720, AA258153, AA424351, AA424866, AA426160, AA281120, AA281932, AA594385, AA594783, AA627918, AA570350, AA744689, AA748507, AA805709, AA806075, AA805170, AA865268, AA872935, AA876562, AA911965, AA916659, AA917349, AA918770.

		AA918850, AA946925, D81172,
		D81397, D78876, C01437, N86700,
		N88264, C05670, C18759
829227	Preferably excluded from the present invention are	T47087, T47086, R44450, R44450,
02/22	one or more polynucleotides comprising a	H13259, H95459, AA035630.
	nucleotide sequence described by the general	AA179511. AA418751. AA527136.
	formula of a-b, where a is any integer between 1 to	AA961714, AA992449
	570 of SEQ ID NO:343. b is an integer of 15 to	101701714,701772447
	584, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:343.	
	and where b is greater than or equal to $a + 14$.	
829231	Preferably excluded from the present invention are	
029231	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
ļ		
	formula of a-b, where a is any integer between 1 to	
	764 of SEQ ID NO:344, b is an integer of 15 to	
	778, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:344.	
620222	and where b is greater than or equal to a + 14.	N124050 N140415 N141430
829232	Preferably excluded from the present invention are	N26050, N40415, N41638,
	one or more polynucleotides comprising a	AA001329, AA001916. AA158802.
	nucleotide sequence described by the general	AA158803. AA213393. AA213394,
	formula of a-b, where a is any integer between 1 to	AA213538, AA424282, AA459213,
	3726 of SEQ ID NO:345, b is an integer of 15 to	AA482209, AA482297, AA580754,
<u> </u>	3740, where both a and b correspond to the	AA729270, AA737966, AA742269,
	positions of nucleotide residues shown in SEQ ID	AA804199, AA937087, N33467,
	- ·	N43860, C02233
920222	14.	
829233	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	432 of SEQ ID NO:346, b is an integer of 15 to	
	446, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:346,	
829239	and where b is greater than or equal to a + 14.	
829239	Preferably excluded from the present invention are one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	768 of SEQ ID NO:347, b is an integer of 15 to	
	782, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:347,	
	and where b is greater than or equal to $a + 14$.	
829240	Preferably excluded from the present invention are	
029240	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	,
	formula of a-b, where a is any integer between 1 to	
	425 of SEQ ID NO:348. b is an integer of 15 to	
	439, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:348,	
	and where b is greater than or equal to $a + 14$.	
829242		T91514, T91542, T94168, T78752,
ロエクムサム		R14281, R31952, R32000, R37970,
		i
		R37971, R39326, R40572, R40572, R55803, R55886, R66639, R81490.
		R81731, H53614, H53652, H87392,
	LUTE OF DECLED INC. 149. U IS All integer of 10 to	1/01/01,1100014, ID0002, IQ/392,

	base I i i i i i i i i i i i i i i i i i i	1,70,70,70
	2356. where both a and b correspond to the	H97030, N26679, N35814, N39832,
	positions of nucleotide residues shown in SEQ ID	N64783, N76195, N92867, N95188.
	NO:349, and where b is greater than or equal to a +	W21546. W25593. W61031.
	14.	W78096. W79455. AA022610.
		AA022611, AA034251, AA063637.
		AA102635. AA102677. AA171440.
		AA190925, AA191317, AA223281,
		AA223381, AA226876, AA227079,
		AA460842, AA461146, AA428884,
		AA429051, AA429588, AA430105,
		AA526857, AA534144, AA542854,
		AA542868, AA554978, AA582495,
		AA605088, AA614111. AA614129,
		AA635924. AA580535. AA732502,
		AA740954, AA812350, AA827279,
		AA857515, AA928973, AA985646,
		AA995666. AI015556, U47719.
		N85053, C02475, C14936, C20619
829246	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1205 of SEQ ID NO:350, b is an integer of 15 to	
	1219, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:350, and where b is greater than or equal to a +	
	14.	
829250	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	394 of SEQ ID NO:351, b is an integer of 15 to	
	408, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:351,	
	and where b is greater than or equal to a + 14.	
829253	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1269 of SEQ ID NO:352, b is an integer of 15 to	
	1283, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:352, and where b is greater than or equal to a +	
	14.	
829256		R17284, R17354, R17854, R24590,
	•	R33671, R33788, R35944, R36246,
	nucleotide sequence described by the general	R36247, R36926, R43105, R44395,
	· · · · · · · · · · · · · · · · · · ·	R49460, R49460, R44395, R43105,
		H24440, H24469, H82721, H83591,
		N50755, N55574, N64383, N92180,
		N90817, AA019697, AA026244.
	r -	AA026441, AA037458, AA037544,
	_	AA127492. AA127587. AA190907.
		AA243225, AA243269, AA279209,
		AA503849, AA507466, AA639522,
		AA731780, AA736864, AA766007,
		AA090592

829263 829266	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 492 of SEQ ID NO:354, b is an integer of 15 to 506, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:354, and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 728 of SEQ ID NO:355, b is an integer of 15 to 742, where both a and b correspond to the positions	N41747
829271	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1681 of SEQ ID NO:356, b is an integer of 15 to 1695, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:356, and where b is greater than or equal to a + 14.	T39261, T49204, T72303, T71643, R07380, T66682, T82066, T83481, R01790, R16223, R20708, R81714, H06087, H09039, H46863, R96294, H50808, H84189, H84190, H84400, H91054, H91348, H96283, N32070, N39797, N45073, N45382, W04773, W21170, W52394, W51822, AA017710, AA017711, AA019476, AA021323, AA021324, AA044865, AA045153, AA054523, AA081533, AA083253, AA084388, AA083588, AA101641, AA101642, AA101720, AA135652, AA136639, AA136846, AA151892, AA179772, AA180489, AA187824, AA188556, AA224078, AA232050, AA232154, AA425968, AA531528, AA581305, AA742833, D83801, D83850,
829273	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 914 of SEQ ID NO:357, b is an integer of 15 to 928, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:357, and where b is greater than or equal to a + 14.	W22420
829274	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1360 of SEQ ID NO:358, b is an integer of 15 to 1374, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:358, and where b is greater than or equal to a + 14.	
829276	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to	

	4138 of SEQ ID NO:359, b is an integer of 15 to	
	4152, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:359, and where b is greater than or equal to a +	
	14.	
829279	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1142 of SEQ ID NO:360, b is an integer of 15 to	
1	1156, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:360, and where b is greater than or equal to a +	
	14.	
829280	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	362 of SEQ ID NO:361, b is an integer of 15 to	
	376, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:361,	
	and where b is greater than or equal to a + 14.	
829283	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	505 of SEQ ID NO:362, b is an integer of 15 to	
	519, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:362,	
	and where b is greater than or equal to $a + 14$.	
829284	Preferably excluded from the present invention are	R35022, N53092, W56437,
	one or more polynucleotides comprising a	AA425107, AA429328, AA639462
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1371 of SEQ ID NO:363, b is an integer of 15 to	
	1385, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:363, and where b is greater than or equal to a +	
	14.	
829285	Preferably excluded from the present invention are	T98355, N35799, N68373,
	one or more polynucleotides comprising a	AA233837, AA234338, AA541363,
	nucleotide sequence described by the general	C05871, C06442
	formula of a-b, where a is any integer between 1 to	
	963 of SEQ ID NO:364, b is an integer of 15 to	
	977, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:364,	
	and where b is greater than or equal to a + 14.	
829287	Preferably excluded from the present invention are	Г75573, Т75574, Т89291, Т92020,
	one or more polynucleotides comprising a	T92115, R09394, R09395, T81925,
	nucleotide sequence described by the general	T81926, T84370, H15008, H15009,
-		H22443, H22477, H42624, H70914,
		H70998, H91740, H70914, N21387,
		N21568, N29475, N31342, N35714,
	of nucleotide residues shown in SEQ ID NO:365,	N39243, N46687, N58940, N62219,
		N62544, N71355, N73001, N79212,
	•	N79311, N80035, N92595, N95523,
		N99823. W02965. W06998.
	<u> </u>	

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			W17066, W17239, W37312,
			W37553, W38873, W38985,
ı			W42735, W42825, W44743,
			W45210, W60642, W60643,
			W61216, W72457, W73365,
			W73442, W73919, W74445.
			W78073, W94432, W92526.
			W95225, N89652, N89752,
			AA034453, AA046851, AA046813,
İ			AA053964, AA055047, AA055127.
			1
			AA074513, AA081359, AA084042,
			AA098833, AA112180, AA136464,
			AA165072, AA164675, AA190836,
			AA255622, AA256734, AA428625.
			AA484049. AA513283. AA535853,
1			F16222, AA587936, AA614830.
İ			AA767121, AA814435, AA832516,
			AA829611. AA829918. AA872922.
1			AA910970, AA987945, AA988657,
			AA948052, AI094757, D79222.
L			D79845. W79251. C00060
	829295	Preferably excluded from the present invention are	N79069, N94383, AA046494.
ŀ		one or more polynucleotides comprising a	AA046766, AA101963. AA099652,
		nucleotide sequence described by the general	AA135109, AA135264, AA148582,
		formula of a-b, where a is any integer between 1 to	AA148581, AA150460, AA156662,
		1283 of SEQ ID NO:366, b is an integer of 15 to	AA534768, AA557811, AA687147,
		1297, where both a and b correspond to the	AA730106, AA810732, AA911850
		positions of nucleotide residues shown in SEQ ID	
ŀ		NO:366, and where b is greater than or equal to a +	
1		14	
Г	829296	Preferably excluded from the present invention are	
		one or more polynucleotides comprising a	
1		nucleotide sequence described by the general	
		formula of a-b. where a is any integer between 1 to	
İ		771 of SEQ ID NO:367, b is an integer of 15 to	
		785, where both a and b correspond to the positions	
		of nucleotide residues shown in SEQ ID NO:367,	
		and where b is greater than or equal to $a + 14$.	
\vdash	829297		H63163, H69239, AA291944,
	,,	one or more polynucleotides comprising a	AA827871, AA995955
		nucleotide sequence described by the general	
		formula of a-b. where a is any integer between 1 to	
		906 of SEQ ID NO:368, b is an integer of 15 to	
		920, where both a and b correspond to the positions	
		of nucleotide residues shown in SEQ ID NO:368,	
		and where b is greater than or equal to $a + 14$.	
\vdash	829298		T85571 T85572 T00405 D04410
	047470		T85571, T85572, T98605, R06410,
			R06411, R72558, W25247,
		1	W58681, AA126722, AA137218,
			AA136191, AA531469, AA565025,
			AA948354, AA978354, AA988766,
			AI057145, N95214
		of nucleotide residues shown in SEQ ID NO:369,	
<u>_</u>	000000	and where b is greater than or equal to a + 14.	
	829302	Preferably excluded from the present invention are	T65369, R16190, R51781, H70499,
			AA203397

	formula of a-b. where a is any integer between 1 to	
	933 of SEQ ID NO:370, b is an integer of 15 to	
	947. where both a and b correspond to the positions	
İ	of nucleotide residues shown in SEQ ID NO:370.	
	and where b is greater than or equal to a + 14.	
829304	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2326 of SEQ ID NO:371, b is an integer of 15 to	
	2340, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:371, and where b is greater than or equal to a +	
	114.	
829320	Preferably excluded from the present invention are	T83172, T83188, T98062, H14392,
027520	one or more polynucleotides comprising a	AA196911, AA514594
	nucleotide sequence described by the general	AA190911, AA314394
	formula of a-b, where a is any integer between 1 to	
	1561 of SEQ ID NO:372, b is an integer of 15 to 1575, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
ì		
	NO:372, and where b is greater than or equal to a + 114.	
829322	Preferably excluded from the present invention are	
027322	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
1	1864 of SEQ ID NO:373, b is an integer of 15 to	
	1878, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:373, and where b is greater than or equal to a +	
920255	14.	
829355	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
i	formula of a-b, where a is any integer between 1 to	
	832 of SEQ ID NO:374, b is an integer of 15 to	
	846, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:374,	
	and where b is greater than or equal to a + 14.	
829364		R10800, H79360, AA130522
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
1	formula of a-b, where a is any integer between 1 to	
	643 of SEQ ID NO:375, b is an integer of 15 to	
	657, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:375,	
	and where b is greater than or equal to a + 14.	
829919	Preferably excluded from the present invention are	
1	one or more polynucleotides comprising a	
1	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	681 of SEQ ID NO:376. b is an integer of 15 to	
1	695, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO.376,	
	and where b is greater than or equal to a + 14.	
829941	Preferably excluded from the present invention are	

	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	3596 of SEQ ID NO:377, b is an integer of 15 to	
	3610, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:377, and where b is greater than or equal to a +	
	14.	
829945	Preferably excluded from the present invention are	
027743	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
İ	formula of a-b, where a is any integer between 1 to	
	209 of SEQ ID NO:378. b is an integer of 15 to	
	223, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:378,	
220216	and where b is greater than or equal to a + 14.	
829946	Preferably excluded from the present invention are	AA288019, AA502347, AA904261
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	795 of SEQ ID NO:379. b is an integer of 15 to	
	809, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:379,	
	and where b is greater than or equal to a + 14.	
829947	Preferably excluded from the present invention are	T66737, T66738, T74003, T77189,
	one or more polynucleotides comprising a	T80326, R13808, R14624, R15371,
1	nucleotide sequence described by the general	R16290, R19838, R21469, R24972,
İ	formula of a-b, where a is any integer between 1 to	R37667, R38092, R39443, R39761,
İ	2536 of SEQ ID NO:380, b is an integer of 15 to	R40215, R40379, R42113, R45233,
	2550, where both a and b correspond to the	R42113, R42856, R40215, R40379,
	positions of nucleotide residues shown in SEQ ID	R45233, R45937, R56287, R59950,
	NO:380, and where b is greater than or equal to a +	R59951, R60203, R60436, H09760,
1	14.	H09845, H10702, H10703, H19185,
		H29333, H29426, N94574,
		W30864, W45066, W45179,
ļ		W47249, W47622, W47621.
		W73903, W74765, W95498.
		W95585, AA039360, AA039359,
		AA043667, AA057482, AA083653,
		AA088919, AA131592, AA135473,
		AA135544, AA147364, AA147416,
		AA161437, AA164913, AA165378,
		AA164333, AA181099, AA430483,
]		AA281878, AA291947, AA493956,
		AA582300. AA740445, AA743497,
		AA875945, AA878761, AA923149,
		AA931525, AA931950, AA935699,
		AA947521, AA962775, AA977566,
		AA984017, AA988746. AI095060,
		D82399, W25818, W51914,
		C15840
829952	Preferably evaluded from the present investigation	
027732	Preferably excluded from the present invention are	R17678, R26888. R27120, R35870,
	one or more polynucleotides comprising a	R35871, R51276, R66882, R67967,
	nucleotide sequence described by the general	H27381. H28345. H38579. R93605,
		R97908, R97907, H53653, H61431,
		H61432, H62657, H63776, H63826,
	1268, where both a and b correspond to the	H65287. H65810. H89508. H89654,

	positions of nucleotide residues shown in SEQ ID NO:381, and where b is greater than or equal to a = 14.	N74909. W23437. AA026270. AA026558. AA177150. AA515407. AA527495. AA535324, AA594129. AA568558. AA864390. AA999878. A1014459. A1017407. A1017824
829954	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 840 of SEQ ID NO:382, b is an integer of 15 to 854, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:382, and where b is greater than or equal to a + 14.	
829955	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1077 of SEQ ID NO:383, b is an integer of 15 to 1091, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:383, and where b is greater than or equal to a + 14.	T47229. T47230. R02311. R43154. R51528, R43154. H42209. R88215. N49583. N93033. W21271. W31966. AA029149. AA513795. AA548358. AA612791. AA633375. AA830042. AA917951. N83314. N86243. C02678
829957	14.	T39589, T40683, H47643, R92700, R99102, R99644, H53816, H58333, H58722, H61989, H61990, H63765, H63809, H73313, H73501, N38910, N46484, N66604, N69475, N75847, W01771, W07430, W74706, W74743, W87451, W87550, N90967, AA010671, AA011259, AA026367, AA026459, AA063538, AA133609, AA157688, AA157767, AA252640, AA262927, AA417991, AA418050, AA425054, AA429232, AA505081, AA602637, AA569939, AA688193, AA714567, AA715109, AA721733, AA761769, AA824602, AA829416, AA910995, AA932302, AA934664, AA960927, AA973923, A1002231, A1094664
829958	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 569 of SEQ ID NO:385, b is an integer of 15 to 583, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:385, and where b is greater than or equal to a + 14.	W31195, W38586, N90200, AA045674, AA045675, AA064826, AA064769, AA082177, AA129757, AA133252, AA187005, AA188378, AA226394, AA491262, AA523135, AA527421, AA527902, AA533279, AA554691, AA632078, AA721457, AA743821, AA760765, AA766192, AA769476, AA805805, AA815094, AA826696, AA873340, AA876652, AA902562, AA935370, AA091473
829960	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2396 of SEQ ID NO:386, b is an integer of 15 to	T87492, T89410, T89773, T80188, T83347, T83577, T85604, T86095, H44324, R86738, R86745, R87175, R87176, R93579, R97628, H59234, H67776, H69384, H89665, H90369, H91278, H93827, N59685, N73235,

829966	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 675 of SEQ ID NO:387, b is an integer of 15 to 689, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:387, and where b is greater than or equal to a + 14.	N77230. N99493. W01516. W07398. W07499. AA011532. AA127663. AA127842. AA127871. AA131770. AA131783. AA203697. AA223149. AA657524. AA770678. AA828971. AA937743 T94747. T91932. R10556. T95267. T95268, H90557. N59601. W02671, W03166, AA523419
829967	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 784 of SEQ ID NO:388. b is an integer of 15 to 798. where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:388. and where b is greater than or equal to a + 14.	T66815, T66816, T90190, R07384, T81628, T81788, T82103, T83000, R23462, R25324, R26060, R31477, R31478, R66771, R80777, R80976, H13673, H13721, R98517, H92094, H94096, H94097, N30791, N31967, N32621, N41566, N47840, N57286, N75841, W07482, W16880, W46399, W46507, W72152, W77912, AA040326, AA040305, AA147001, AA147002, AA176399, AA178863, AA188782, AA188633, AA502400, AA503270, AA508898, AA515395, AA557399, AA610193, AA714481, AA740261, AA748847, AA760659, AA766512, AA824416, AA877577, AA910372, AA938717, A1018625, A1056489, N92492, A1084101, AA642564
829970	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1677 of SEQ ID NO:389, b is an integer of 15 to 1691, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:389, and where b is greater than or equal to a + 14.	W57592, AA253247
829981		N44941
829985		T58690, H10115, AA101544, AA171779, AA173847

	and whom his groots than an arral as a 1.14	1
020004	and where b is greater than or equal to a + 14.	D72(00 1120575 1 1 51 (110
829986	Preferably excluded from the present invention are	R72689, H39575, AA516440.
	one or more polynucleotides comprising a	AA662417
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	913 of SEQ ID NO:392. b is an integer of 15 to	
	927, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:392,	
	and where b is greater than or equal to a + 14.	
829988	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1009 of SEQ ID NO:393, b is an integer of 15 to	
	1023, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:393, and where b is greater than or equal to a +	
	14.	
829990	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	808 of SEQ ID NO:394. b is an integer of 15 to	•
	822, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:394,	
	and where b is greater than or equal to a + 14.	
829991	Preferably excluded from the present invention are	N22386, AA461107, AA493109,
		AA932044, AA976154, AA995814
	nucleotide sequence described by the general	,
	formula of a-b, where a is any integer between 1 to	
	1688 of SEQ ID NO:395, b is an integer of 15 to	
	1702, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:395, and where b is greater than or equal to a +	
	14.	
829992	Preferably excluded from the present invention are	W44338, W44452, AA600841,
	I	AA577032, AA936480, AA973451
	nucleotide sequence described by the general	•
	formula of a-b, where a is any integer between 1 to	
	844 of SEQ ID NO:396, b is an integer of 15 to	
	858, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:396,	
	of nucleotide residues shown in SEQ ID NO:396, and where b is greater than or equal to a + 14.	
829993	and where b is greater than or equal to a + 14.	
829993	and where b is greater than or equal to a + 14. Preferably excluded from the present invention are	
829993	and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a	
829993	and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general	
829993	and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to	
829993	and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1096 of SEQ ID NO:397, b is an integer of 15 to	
829993	and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1096 of SEQ ID NO:397, b is an integer of 15 to 1110, where both a and b correspond to the	
829993	and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1096 of SEQ ID NO:397, b is an integer of 15 to 1110, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID	
829993	and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1096 of SEQ ID NO:397, b is an integer of 15 to 1110, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:397, and where b is greater than or equal to a +	
	and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1096 of SEQ ID NO:397, b is an integer of 15 to 1110, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:397, and where b is greater than or equal to a + 14.	R17950 R56786 H00888 H01803
829993 829998	and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1096 of SEQ ID NO:397, b is an integer of 15 to 1110, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:397, and where b is greater than or equal to a + 14. Preferably excluded from the present invention are	R12950. R56786. H09888. H91803
	and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1096 of SEQ ID NO:397, b is an integer of 15 to 1110, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:397, and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a	R12950. R56786. H09888. H91803
	and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1096 of SEQ ID NO:397, b is an integer of 15 to 1110, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:397, and where b is greater than or equal to a + 14. Preferably excluded from the present invention are	R12950. R56786. H09888. H91803

	864, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:398.	
	and where b is greater than or equal to a + 14.	
829999	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	257 of SEQ ID NO:399. b is an integer of 15 to	
	271, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:399,	
	and where b is greater than or equal to $a + 14$.	
830000	Preferably excluded from the present invention are	
030000	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	911 of SEQ ID NO:400, b is an integer of 15 to	
	925, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:400,	
	and where b is greater than or equal to a + 14.	
830001	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1071 of SEQ ID NO:401, b is an integer of 15 to	
	1085, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:401, and where b is greater than or equal to a +	
	14.	
830005	Preferably excluded from the present invention are	
COOOCO	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	334 of SEQ ID NO:402, b is an integer of 15 to	
	348, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:402,	
	and where b is greater than or equal to a + 14.	
830009	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1456 of SEQ ID NO:403, b is an integer of 15 to	
	1470, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:403, and where b is greater than or equal to a +	
	14.	
830010	Preferably excluded from the present invention are	
· -	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2473 of SEQ ID NO:404, b is an integer of 15 to	
	2487, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:404, and where b is greater than or equal to a +	
	14.	
830127	1	T80487, R61657
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	

	formula of a-b, where a is any integer between 1 to	
	1242 of SEQ ID NO:405, b is an integer of 15 to	
	1256, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:405, and where b is greater than or equal to a +	
	14.	
830128	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	757 of SEQ ID NO:406, b is an integer of 15 to	
	771, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:406,	
	and where b is greater than or equal to a + 14.	
830129	Preferably excluded from the present invention are	T53792, T53907, T53943, T62085.
	one or more polynucleotides comprising a	T62142, R20454, R78770, R78927,
		R79027. R79077. H98608. N48338,
	, -	N49063. W01400, W52282.
	2629 of SEQ ID NO:407, b is an integer of 15 to	W57571. AA035258. AA035470.
	•	AA101541, AA114162, AA121802,
		AA129334. AA129628. AA130575,
	·	AA130988. AA131026. AA156750,
	14.	AA156922, AA157263, AA157360,
		AA223729, AA223816, AA489148,
l		AA490861, AA516421, AA526784,
		AA533164, AA535426, AA552972,
		AA583471, AA605156, AA575994,
		AA747160, AA804291. AA887994,
		AA937881, AA948245, AA974518,
		AA974784, AI002302, AI051153,
		N84559, N86782, AA642578, AA093419
830137	Preferably excluded from the present invention are	AA093419
050157	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1632 of SEQ ID NO:408, b is an integer of 15 to	
}	1646, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:408, and where b is greater than or equal to a +	
	14.	
830140	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	862 of SEQ ID NO:409, b is an integer of 15 to	
	876, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:409,	
	and where b is greater than or equal to $a + 14$.	
830157	Preferably excluded from the present invention are	
ļ	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	1836 of SEQ ID NO:410, b is an integer of 15 to	
	1850. where both a and b correspond to the	
1	positions of nucleotide residues shown in SEQ ID	
1		

	14.	T
830195	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 647 of SEQ ID NO:411, b is an integer of 15 to 661, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:411, and where b is greater than or equal to a + 14.	
830196	14.	T47007, T47008, T59996. T63678, T72979, T73043, R20327, R34736, H18043, H69946, H98876. W79567, AA069850, AA070319, AA074422, AA076309, AA081601, AA101958, AA113902, AA126400, AA134002, AA134658, AA134640, AA135254, AA146731, AA155584, AA157966, AA159110, AA159386, AA159466, AA160637, AA179462, AA182917, AA182648, AA190534, AA220918, AA223557, AA227300, AA232517, AA233585, AA932527, N83710, N85080, W28216, W28475, W28650, AA090479
830409	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1323 of SEQ ID NO:413, b is an integer of 15 to 1337, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:413, and where b is greater than or equal to a + 14.	
830417	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 778 of SEQ 1D NO:414, b is an integer of 15 to 792, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:414, and where b is greater than or equal to a + 14.	T70867, R12290, T78032, T80453, T80532, R12432, R12507, R18857, R23505, R51536, R52975, R53640, H12996, H22829, H63914, H64034, H71775, H85810, H97709, N42249, W39175, AA018531, AA018491, AA018481, AA052919, AA079678, AA083267, AA102444, AA127022, AA147778, AA226551, AA994837, N84172, W95500, C02827, C04397, AA090040
830531	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1328 of SEQ ID NO:415, b is an integer of 15 to 1342, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:415, and where b is greater than or equal to a + 14.	
830677	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to	

835940	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	514 of SEQ ID NO:423, b is an integer of 15 to	
	528, where both a and b correspond to the positions	i
	of nucleotide residues shown in SEQ ID NO:423.	
	and where b is greater than or equal to a + 14.	
836953	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	3104 of SEQ ID NO:424. b is an integer of 15 to	
	3118, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:424, and where b is greater than or equal to a +	
027107	14.	
837105	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	1396 of SEQ ID NO:425, b is an integer of 15 to	
	1410. where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:425, and where b is greater than or equal to a +	
	14.	
837300	Preferably excluded from the present invention are	R22778, H06717, H18453, H26987,
	one or more polynucleotides comprising a	H26988, N33207, N44745,
	nucleotide sequence described by the general	W57874, W58145, AA040435,
	formula of a-b, where a is any integer between 1 to	AA278615, AA507344, AA558666.
	1408 of SEQ ID NO:426, b is an integer of 15 to	AA578863, AA872443, AA877052,
	1422, where both a and b correspond to the	AA877120, AA879047, AA887537,
	positions of nucleotide residues shown in SEQ ID	AA910397, AA931214, AI025125,
	F "	AA040434
	14.	111010131
837373		R21137, H67522, AA081145,
55.515		AA082099, AA082371, AA130000,
		AA130415, AA130417, AA132638,
		AA136918, AA147401, AA157404,
	· · · · · · · · · · · · · · · · · · ·	
		AA186519, AA186340, AA186565,
		AA190900, AA191038, AA190612,
		AA224065, AA469308, AA514706,
		AA640391, AA659609, AA814425,
)	AA932379, AA961224, AA974800,
		AA977316, AI002396, N83374,
	I .	N83520, N83658, N83770, N85953,
		N85954, N86486, N86566, N86680,
		N87938, N88164, N89316, C14148,
NEL CONTRACTOR OF		C14189, AA095113, AA206109
837687	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1608 of SEQ ID NO:428, b is an integer of 15 to	
	1622, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	prositions of nucleoting residues shown in JEQ ID	
	NO:428, and where b is greater than or equal to a +	

_ 	14.	
837991	Preferably excluded from the present invention are	
037771	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	534 of SEQ ID NO:429, b is an integer of 15 to	
	548. where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:429,	
020442	and where b is greater than or equal to a + 14.	
838442	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	555 of SEQ ID NO:430, b is an integer of 15 to	
	569, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:430.	
	and where b is greater than or equal to a + 14.	
840541	Preferably excluded from the present invention are	AA205009, AA471299
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	535 of SEQ ID NO:431, b is an integer of 15 to	
	549. where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:431.	
	and where b is greater than or equal to a + 14.	
840543	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1207 of SEQ ID NO:432, b is an integer of 15 to	
	1221, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:432, and where b is greater than or equal to a +	
	14.	<u> </u>
840550	Preferably excluded from the present invention are	T53643, T53644, R67842, R67843,
	one or more polynucleotides comprising a	R79329, H12321, H40510, R83261,
	nucleotide sequence described by the general	R88722, R90978, R97638, H51690,
		H52190, H78699, H89714, N58070,
	1101 of SEQ ID NO:433, b is an integer of 15 to	N69832, N98971, AA251228,
	1115, where both a and b correspond to the	AA251227, AA282101, AA513006,
	positions of nucleotide residues shown in SEQ ID	AA528240, AA558167, AA593383,
	NO:433, and where b is greater than or equal to a +	AA574200, AA577197, AA765822
		AA847143, AA863087, AA931049,
		AA694054
840563	Preferably excluded from the present invention are	R38732, R71612, R71613, N24083,
		N31377, N47304, N48623,
	nucleotide sequence described by the general	W87303, W90742, W90798,
		AA011634, AA011635, AA253397,
	1590 of SEQ ID NO:434, b is an integer of 15 to	AA253501, AA257091, AA257121,
		AA427877, AA503469, AA565303,
	positions of nucleotide residues shown in SEQ ID	AA587449, AA613721, AA740312,
		C01498. AA434535, AA443422.
		AA454584, AA677081, Al022365.
		A1052631, AA693545
840565	Preferably excluded from the present invention are	
0.0000	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	practication dequation described by the general	<u> </u>

	formula of a-b, where a is any integer between 1 to	
	287 of SEQ ID NO:435, b is an integer of 15 to	
	301. where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:435,	
	and where b is greater than or equal to $a + 14$.	
840569	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	}
	formula of a-b. where a is any integer between 1 to	
	304 of SEQ ID NO:436, b is an integer of 15 to	
	318. where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:436,	
	and where b is greater than or equal to $a + 14$.	
840570	Preferably excluded from the present invention are	A1075277, AA675912, AA675911
040370	one or more polynucleotides comprising a	M1013211, MA013912, MA013911
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1868 of SEQ ID NO:437, b is an integer of 15 to	
	1882. where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:437, and where b is greater than or equal to a +	
840571	14.	T17020 T47052 T74041 T75422
8403/1	Preferably excluded from the present invention are	T47828. T47852, T64841, T65430,
	one or more polynucleotides comprising a	T65510. T72584, R17181, R19667,
	nucleotide sequence described by the general	R34515, R41731, R44453, R49058.
i		R50770, R51812, R41731, R49058.
	2042 of SEQ ID NO:438, b is an integer of 15 to	R44453, H11004, H15433, H15488,
	The state of the s	H28705, H28834, AA515873.
		AA687085, AA863313, AA903803,
		AA452278, AA452447, AA781246,
	14.	AA972396, AA993822, AI002821,
		T10761, D25941, Z41977, Z40833.
		Z44675, F01498, F03695, F07749,
		F11901, F12192, F09548, F09821
840573	Preferably excluded from the present invention are	AA149788
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
1	formula of a-b, where a is any integer between 1 to	
	707 of SEQ ID NO:439, b is an integer of 15 to	
1	721, where both a and b correspond to the positions	
-	of nucleotide residues shown in SEQ ID NO:439,	
	and where b is greater than or equal to a + 14.	
840574		T65588, R40688, R42248, R53793,
	one or more polynucleotides comprising a	R53794, R42248, R20733, R40688,
		R66541, R68438, R68439, R77228,
	Tall the state of	R77229. R77595, H18969, H20988,
		H21032, H49673, H50064, N72287,
		N80600. W07440, W40167.
		AA034401, AA035044, AA035506,
	T	AA035555, AA182662, AA182740,
		AA483608, AA588302, AA602357.
		AA604612, AA639138, D81410,
		D81461. D81692, AI097583,
		C15094, AA404494, AA705982.
		A1080676, A1095724, F09676
840575		W68038, W93774
0.05,5	one or more polynucleotides comprising a	
	one or more poryndereondes comprising a	

	nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1981 of SEQ ID NO:441. b is an integer of 15 to 1995, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:441, and where b is greater than or equal to a + 14.	
840579	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1709 of SEQ ID NO:442, b is an integer of 15 to 1723, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:442, and where b is greater than or equal to a + 14.	R25715, R72972, N42280, N99672, AA046377, AA112337, AA137170, AA156083, AA156289, AA234550, AA236661, AA251743, AA256954, AA256645, AA704119, Al073518, AA773818
840580	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1885 of SEQ ID NO:443, b is an integer of 15 to 1899, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:443, and where b is greater than or equal to a + 14.	
840581	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 416 of SEQ ID NO:444, b is an integer of 15 to 430, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:444, and where b is greater than or equal to a + 14.	
840605	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2139 of SEQ ID NO:445, b is an integer of 15 to 2153, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:445, and where b is greater than or equal to a + 14.	T58718, R60700, R60701, H30380, H30430, N42386, AA126493, AA126620. AA128024, AA128067, AA236455, AA234073, AA470382, AA503709. AA635761, AA573225, AA573330, AA659473, AA807615, AA824445, AA825364, AA888670, AA931858, AA935053, AA968889, AA971410, AA973830, AA974807, AA977019, AA991272, AA975535, C02768, AA094041, AA478779, AA478898, AA487854, AA777751, AA845416, AA969094, AI027197, AI027391, AI093994, AI094088, T24618, T25054, Z41574
840607	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 478 of SEQ ID NO:446. b is an integer of 15 to 492, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:446, and where b is greater than or equal to a + 14.	
840609	Preferably excluded from the present invention are	

	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	1525 of SEQ ID NO:447, b is an integer of 15 to	
	1539, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:447. and where b is greater than or equal to a +	
	14.	
840610	Preferably excluded from the present invention are	
040010	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	3969 of SEQ ID NO:448, b is an integer of 15 to	
	3983, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	İ
	NO:448, and where b is greater than or equal to a +	
2.00	14.	
840611	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1163 of SEQ ID NO:449, b is an integer of 15 to	
	1177, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
•	NO:449, and where b is greater than or equal to a +	
	14.	
840612	Preferably excluded from the present invention are	
1	one or more polynucleotides comprising a	
İ	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2414 of SEQ ID NO:450, b is an integer of 15 to	
	2428, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
1	NO:450, and where b is greater than or equal to a +	
	14.	
840615	Preferably excluded from the present invention are	T65122, T65191, R32009, R32056,
	one or more polynucleotides comprising a	R69507, R70398, H06201, R94284,
	nucleotide sequence described by the general	R94634, H51636, H92705, H99325,
	formula of a-b, where a is any integer between 1 to	N24056, N26430, N35932, N39594,
	2471 of SEQ ID NO:451, b is an integer of 15 to	N46740, N70376, W88440,
	2485, where both a and b correspond to the	AA017294, AA115093, AA115094,
	positions of nucleotide residues shown in SEQ ID	AA171679, AA173604, AA173857,
İ		AA233061, AA243856, AA279997,
	14.	AA419480, AA419595, AA536095,
		AA583207, AA588657, AA604241,
		AA639870, AA713580, AA714906,
ĺ		AA730848, AA741161, AA832122,
		AA879136, AA903032, AA938350,
		AA948280. AA976706. W05017,
		AA171795. AA401642. AA405839,
		AA411823, AA628174, AA725876,
		AA725882, AA833521, AA954549,
		AA992844, A1014611, A1018081,
		AI024440, AI025063, AI049677,
		AI085041. AI090013. AI091784,
	I	F11915. F09562. AA699825
840622	Preferably excluded from the present invention are	

	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	949 of SEQ ID NO:452, b is an integer of 15 to	
	963, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:452.	
	and where b is greater than or equal to a + 14.	
840623	Preferably excluded from the present invention are	AA248685
	one or more polynucleotides comprising a	
į	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	590 of SEQ ID NO:453, b is an integer of 15 to	
	604. where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:453.	
	and where b is greater than or equal to a + 14.	
840624		N20001 N54665 N45221 F12612
840624	Preferably excluded from the present invention are	N38891, N54665, N45221, F13612,
	one or more polynucleotides comprising a	F13702
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1903 of SEQ ID NO:454, b is an integer of 15 to	
	1917, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:454, and where b is greater than or equal to a +	
	14.	
840631	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1524 of SEQ ID NO:455, b is an integer of 15 to	
	1538, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:455, and where b is greater than or equal to a +	
	14.	
840632	Preferably excluded from the present invention are	H15848, H16160, H27966, H27967,
	I -	H42798, H87969, N64073, N64076,
	1	N64078, AA045740, AA280032,
	1	AA280099, AA283727, AA290929,
		AA814009, AA975514, A1094746,
	1	AA449900, AA716758, AA724921,
		i i
	P	AA860380, AA909482
	NO:456, and where b is greater than or equal to a +	
940622	Drofoughly avaladed from the propert invention are	
840633	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	. , , ,	
	14.	
840634		AA063114
	nucleotide sequence described by the general	
	proceedings sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
840634	Preferably excluded from the present invention are one or more polynucleotides comprising a	AA063114

	of nucleotide residues shown in SEQ ID NO:458.	
	and where b is greater than or equal to a + 14.	
840635	Preferably excluded from the present invention are	
1	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	1269 of SEQ ID NO:459, b is an integer of 15 to	
	1283, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:459, and where b is greater than or equal to a +	
	14.	
840636	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
İ	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	421 of SEQ ID NO:460, b is an integer of 15 to	
	435, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:460,	
	and where b is greater than or equal to a + 14.	<u></u>
840637	Preferably excluded from the present invention are	AA001547, AA012848, AA012933,
	one or more polynucleotides comprising a	AA017085, AA017194, AA018490.
	nucleotide sequence described by the general	AA810954
	formula of a-b. where a is any integer between 1 to	
	640 of SEQ ID NO:461, b is an integer of 15 to	
	654, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:461,	
	and where b is greater than or equal to a + 14.	
840639	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2231 of SEQ ID NO:462, b is an integer of 15 to	
	2245, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:462, and where b is greater than or equal to a +	
	14.	
8 406 40	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1266 of SEQ ID NO:463, b is an integer of 15 to	
	1280, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:463, and where b is greater than or equal to a +	
	14.	
8406 50	Preferably excluded from the present invention are	İ
	one or more polynucleotides comprising a	j
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2417 of SEQ ID NO:464, b is an integer of 15 to	
	2431, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:464, and where b is greater than or equal to a +	
	14.	
840652	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	

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	formula of a-b, where a is any integer between 1 to	,
	575 of SEQ ID NO:465. b is an integer of 15 to	
	589, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:465,	
	and where b is greater than or equal to a + 14.	
840653	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
ł	formula of a-b, where a is any integer between 1 to	
	1093 of SEQ ID NO:466, b is an integer of 15 to	
	1107, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:466, and where b is greater than or equal to a +	
	14.	
840655	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2183 of SEQ 1D NO:467, b is an integer of 15 to	
	2197, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	1
	NO:467, and where b is greater than or equal to a +	
	14.	
840659	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	3597 of SEQ ID NO:468. b is an integer of 15 to	
l	3611, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:468, and where b is greater than or equal to a +	
	14.	
840660	Preferably excluded from the present invention are	AA253121, AA253250
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
l	formula of a-b, where a is any integer between 1 to	
	506 of SEQ ID NO:469, b is an integer of 15 to	
	520, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:469,	
	and where b is greater than or equal to a + 14.	
840661	Preferably excluded from the present invention are	R40087, AA483309, AA720883,
		AA747744. AA811974, AA853049
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	865 of SEQ ID NO:470, b is an integer of 15 to	
	879, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:470,	
0.40.555	and where b is greater than or equal to a + 14.	P12255 P21522 = 225
840662	•	R13355. R21688. R23614. R26167,
		R40871. R46580, R46580, R40871,
		R67867, R67868. H01101. H01102,
i		H01867, H01868, H02834, H03726,
		H93708. H95440. H95441, N53845,
		N66438, N68125, N69039, N73342,
		AA045604, AA045603, AA101337,
		AA100423, AA101346, AA101345,
	14.	AA156296. AA157481. AA158453, J

840663	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to	AA158452. AA181954. AA187577, AA428908. AA281008. AA281174, AA551925. AA557463. AA588077. AA742447. AA768547. AA814696, AA991197. AI017348. C05887, C06049. AA093441. AA496804, AA599560. AA665699. AA707837, AA775203. AA843259, AA844411, AA889762. AI091389
	453 of SEQ ID NO:472, b is an integer of 15 to 467, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:472, and where b is greater than or equal to a + 14.	
840670	formula of a-b, where a is any integer between 1 to 1826 of SEQ ID NO:473, b is an integer of 15 to 1840, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:473, and where b is greater than or equal to a +	T71092, T67636, R08286, H13339, H16147, H25692, H38182, R84798, R98981, N79217, W19493, W25579, AA034100, AA056965, AA262921, AA720972, AA768301, AA825825, AA972578, AA094484, AA394311, AA487380, AA778203, A1004258, A1005389, Z39071, Z42947, F02333, F06078, AA682274
840671	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1244 of SEQ ID NO:474, b is an integer of 15 to 1258, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID	R46252, R46252, N49076, W04352, W86176, W86177, W92672, W92692, W93417, AA029831, AA085198, AA464962, AA633124, AA737628, AA737662, AA780382, AA811098, AA836105, AA857959, AA994284, AI076231, C01217, AA780068, AI004350
840672	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 4217 of SEQ ID NO:475, b is an integer of 15 to 4231, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:475, and where b is greater than or equal to a + 14.	
840673	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 677 of SEQ ID NO:476, b is an integer of 15 to 691, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:476, and where b is greater than or equal to a + 14.	
840674	one or more polynucleotides comprising a	R51915, R54456, R54458, H18062, H18757, W03838, W77892, AA629317, F09686

	1404 of SEQ ID NO:477, b is an integer of 15 to	
	1418, where both a and b correspond to the	
Ì	positions of nucleotide residues shown in SEQ ID	
	NO:477. and where b is greater than or equal to a +	
	14.	
840677	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1223 of SEQ ID NO:478, b is an integer of 15 to	
	1237, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:478, and where b is greater than or equal to a +	
	14.	
840678	Preferably excluded from the present invention are	T63520, R75617, R75713, R78802,
	one or more polynucleotides comprising a	R79103, H25459, H27826, H85479,
	nucleotide sequence described by the general	H85486, H92403, H92620.
	formula of a-b. where a is any integer between 1 to	AA001384, AA001383, AA057832,
	1084 of SEQ ID NO:479, b is an integer of 15 to	AA235008, AA253050, AA424651,
	1098, where both a and b correspond to the	AA430054. AA430263, AA287947,
	positions of nucleotide residues shown in SEQ ID	AA288014, AA481556, AA491320,
		AA505123, AA548974, AA715297,
	14.	AA736510, AA747303, AA748308,
		AA829746, AA909843, AA916866,
		AA642031, AA211184, AA398153,
		AA399494. AA477559, AA477676,
		AA782481, AI079168, AI040143,
		A1080176, A1082310, D12148
8406 80	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	670 of SEQ ID NO:480, b is an integer of 15 to	
	684, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:480,	
	and where b is greater than or equal to a + 14.	
840691	Preferably excluded from the present invention are	T83393, T84298, T84482, R72668,
		H05782, H06072, H17206,
		AA199607, AA236200, AA234037,
		AA256784, AA256492, AA256503,
		AA256504, AA255526, AA256710,
		AA424131, AA515794, AA580599,
		AA748677, AA872189, AA937350,
	= -	AA995072, C00417, AA451719,
		AA992171, Al091615, F01634,
940700		F05381
840700		N74558, W02490, AA250756,
	one or more notamucleatides commence a	
		AA721388, AA937643, AA077596,
	nucleotide sequence described by the general	AA633788, AA779964, AA812535,
	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to	AA633788, AA779964, AA812535, AA912417, AA978273, AA993172,
	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1234 of SEQ ID NO:482, b is an integer of 15 to	AA633788, AA779964, AA812535,
	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1234 of SEQ ID NO:482, b is an integer of 15 to 1248, where both a and b correspond to the	AA633788, AA779964, AA812535, AA912417, AA978273, AA993172,
	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1234 of SEQ ID NO:482, b is an integer of 15 to 1248, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID	AA633788, AA779964, AA812535, AA912417, AA978273, AA993172,
	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1234 of SEQ ID NO:482, b is an integer of 15 to 1248, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:482, and where b is greater than or equal to a +	AA633788, AA779964, AA812535, AA912417, AA978273, AA993172,
	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1234 of SEQ ID NO:482, b is an integer of 15 to 1248, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:482, and where b is greater than or equal to a + 14.	AA633788, AA779964, AA812535, AA912417, AA978273, AA993172, AA993810, D20826
840701	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1234 of SEQ ID NO:482, b is an integer of 15 to 1248, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:482, and where b is greater than or equal to a + 14. Preferably excluded from the present invention are	AA633788, AA779964, AA812535, AA912417, AA978273, AA993172,

840702	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1848 of SEQ ID NO:483, b is an integer of 15 to 1862, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:483, and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1650 of SEQ ID NO:484, b is an integer of 15 to 1664, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID	W72232. W76469. W95399. W95448. AA171990. AA172306. AA193490. AA193486. AA215714. AA481093. AA687382. AA721070. AA731304. AA765386. AA807488. AA830428. AA836173. AA872676, AA903225. AA947751. AA948309. AA679104. AA708104. AA844037. AA773240. AA906091. AI092620 T90642. T83169. R34427. R38259, R46634. R48960. R46634. H08738, H42054. H42099. N55339, N58337, N77345, N77705. W80824, W80945. AA022974. AA045928, AA047535. AA047635. AA129564, AA173541, AA173942, AA189109,
	14.	AA232209: AA232711. AA256680, AA256679, AA661511. AA877392, AA876721. AA876373. AA977525, W26186, AA045814. AA455935, AA629608. AA456404, AA706605, AA716649, AA716749. AA777167, AA884059, AA910769. AA913276, AI091820, Z30152, Z38891, F05971. F10707
840705	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 955 of SEQ ID NO:485, b is an integer of 15 to 969, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:485, and where b is greater than or equal to a + 14.	
840715	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2558 of SEQ ID NO:486, b is an integer of 15 to 2572, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:486, and where b is greater than or equal to a + 14.	
840717	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1437 of SEQ ID NO:487, b is an integer of 15 to 1451, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:487, and where b is greater than or equal to a + 14.	T79990, R16372, R25837, R32657, R42317, R46835, R53484, R53485, R46835, R42317, R60577, R60630, R71392, R72562, H06281, H06328, H10997, H26530, W71994, W76508, W87458, W87554, AA029771, AA029772, AA039881, AA039966, AA046839, AA047010, AA057673, AA069571, AA069563, AA524160, AA865941, AI017434, AA649997, AA705373, AA776517, AI057398, AI078071, T17221, Z40755, Z45024
840718	Preferably excluded from the present invention are one or more polynucleotides comprising a	

		
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1186 of SEQ ID NO:488, b is an integer of 15 to	
	1200, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:488, and where b is greater than or equal to a +	
	14.	
840719	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	271 of SEQ ID NO:489. b is an integer of 15 to	
	285, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:489,	
	and where b is greater than or equal to $a + 14$.	
840724	Preferably excluded from the present invention are	
040724		
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	668 of SEQ ID NO:490. b is an integer of 15 to	
	682. where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:490,	
0.10=0.5	and where b is greater than or equal to a + 14.	
840725		T52811. T52812, R55369, R55607,
		H29580, H29664, N34553, N59374,
		N72870, N76477, N78788, N93946,
		W03090, W03506, W07215,
		W40445, W99359, W99389,
		AA031839, AA054995, AA120818,
•	positions of nucleotide residues shown in SEQ ID	AA232731, AA236542, AA424556,
	NO:491, and where b is greater than or equal to a +	AA424653, AA514847. AA528821,
	14.	AA564104, AA808072, AA446773,
		AA449408, AA478629, AA644625,
		Z38400, Z42136
840727	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2695 of SEQ ID NO:492, b is an integer of 15 to	
	2709, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:492, and where b is greater than or equal to a +	
	14.	
840731		R11513, R11731, R12441, R17288,
0.0751		R56469, R60452, H14889, H21054,
		R85192, H78221. H78227, H78420,
	1 * *	H78427, N44642, N50726, N63598,
		N74649, N79564, W24822,
		AA121181, AA179753, AA180330,
	F -	AA210820, AA227204, AA255636,
		AA687763, AA761335, AA948300,
		AA203176, AA216635, AA404332,
0.40=22		AA434598. AA703138
840733	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	

		<u> </u>
	1254 of SEQ ID NO:494. b is an integer of 15 to	
	1268, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:494. and where b is greater than or equal to a +	
	14.	
840734	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	370 of SEQ ID NO:495, b is an integer of 15 to	
	384, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:495,	
	and where b is greater than or equal to a + 14.	
840736	Preferably excluded from the present invention are	W42658, W45183, W78758,
0.0750	one or more polynucleotides comprising a	W80493, W84630, W84681,
	nucleotide sequence described by the general	W87610, W87901, W94898,
	formula of a-b, where a is any integer between 1 to	W91935, AA484859, AA484987,
	961 of SEQ ID NO:496, b is an integer of 15 to	AA505968, AA640115. AA573309.
	1	AA657855, AA659105. AA659440,
	of nucleotide residues shown in SEQ ID NO:496,	AA715002, AA732364. AA740180.
	and where b is greater than or equal to a + 14.	AA742752, AA746960, AA804898.
	and where o is greater than or equal to a + 14.	AA825656, AA825665, AA987818,
		N83465, C14070, AA643844,
		AA652253, F20803, AA432012,
		AA678021, AA733050, AA782910,
		AA846523, AI076183, AI085413,
0.40555		D19829
840737	Preferably excluded from the present invention are	T67132, T67133, T87248, H56042,
	one or more polynucleotides comprising a	H56119, N25201, N69014,
	nucleotide sequence described by the general	AA128513, AA129959, AA425701,
		AA428551, AA911113, AA976370,
	2061 of SEQ ID NO:497, b is an integer of 15 to	AA987472, AI004931, AI081047,
	2075, where both a and b correspond to the	D80388, D80909, D80910, D81505,
	positions of nucleotide residues shown in SEQ ID	C14479, C14492, C14494, C14493,
	_ ·	C14495, C14514, C14527, C15539,
	14.	AA283123, AA779369, AA773654,
		AI051187, AI091167, AI093159,
		T24488, AA694308, AA700909
840739	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1890 of SEQ ID NO:498, b is an integer of 15 to	
	1904, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:498, and where b is greater than or equal to a +	
	14.	
840746		R12296, R12807, R16375, R16741,
2.37.10		R18738, R38102, R42319, R43498,
		R44177, R51993, R51994, R43498,
	•	R43060, R44177, R42319, H40121,
	· · · · · · · · · · · · · · · · · · ·	H40275, N22396, N69345,
		W37333, W38750, AA054559,
		AA054619, AA131766, AA131779,
	,	AA150020, AA150085, AA255834,
		AA548724, AA807007, AA825362,
	I .	AA828253, N83830, N85321.

		N86360, AA205805, AA436905, AA709097, AA725018, Z22234, T03480, AI016816, AI093402, F08823, F10788
840748	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1610 of SEQ ID NO:500. b is an integer of 15 to 1624, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:500, and where b is greater than or equal to a + 14.	
840750	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 834 of SEQ ID NO:501, b is an integer of 15 to 848, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:501, and where b is greater than or equal to a + 14.	
840751	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 3178 of SEQ ID NO:502, b is an integer of 15 to 3192, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:502, and where b is greater than or equal to a + 14.	T39881. T40844, T40852, T40854, T40860. T40866, T50407, T50538, T55741, T94376, T94464, H27286, H81895, H94293. N78697, N99150, W19295, W21325. W24158. W25537, W45247, W72714, W93341, W95026. AA027063, AA065228, AA064926, AA070691, AA099952, AA127948, AA127982, AA142908, AA150910, AA460946, AA461252, AA230313, AA494344, AA534955, AA535709, AA557910, AA564147, AA564626, AA583542, AA523611, AA594463, AA595987, AA603874, AA613440, AA613660, AA635415, AA578985, AA568423, AA916523, AA922346, AA935323, AA650041, AA652730, AA654746, AA454065, AA486952, AA487075, AA487215, AA706108, AA722670, AA846544, AA853055, AA853056, AA853392, AA861048, AA991772, A1042420, A1074102, A1078712, A1041798, A1095622
840757	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 669 of SEQ ID NO:503, b is an integer of 15 to 683, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:503, and where b is greater than or equal to a + 14.	A1041798, A1095622 T50000, T50064, T50195, T58356, T58401, T58454, T59152, T94178, R06456, R06510, R72766, R72767, H02583, H02966, H04264, H39892, H41455, H44794, H46477, H46959, H51519, N45305, N54519, N54756, N63507, N64319, N76221, N94805, AA053467, AA056133, AA075160, AA078755, AA078756, AA079464, AA079463, AA079663, AA079767, AA088705, AA100045, AA100739,

		AA113258. AA113355. AA113436.
		AA115702, AA115703, AA127146.
		AA132371, AA132616, AA147349,
		AA147400. AA151458. AA151459.
ì	•	AA156143, AA156398, AA157076,
		AA157164, AA157503, AA158148,
		AA158599, AA159018, AA159163,
		AA159790, AA159943, AA160779,
		AA160885, AA160895, AA160910,
		AA179280. AA181232, AA181237.
		AA181305. AA181255, AA181209,
		AA181326, AA182784, AA187267.
		AA187185, AA187224, AA187761,
1		AA186497. AA186503, AA187019.
		AA187058, AA187039, AA187079,
1		AA188443, AA192753, AA192829.
		AA192840, AA193199, AA193200,
		AA194570. AA421647, AA427634,
		AA469030, AA480763, AA482684,
		AA493670, AA501840, AA506094,
		AA507481, AA513173, AA514900,
		AA515423. AA524000, AA526363,
		AA526377, AA528558, AA528622,
		AA528762. AA533899, AA552652,
		AA555119, AA564174, AA564196,
		AA582614, AA583793, AA584240, AA588860, AA603073, AA604397,
		AA577162, AA662810, AA689248.
1		AA689277, AA714332, AA714522,
1		AA720655, AA729281, AA865192.
		AA888414, AA912488, AA934668,
1		AA936157, AA947503, AA953047.
-		AA961820, AA968484, AA976297,
		AA983436, AA988025, AA988424.
		AA991968, AA975722, Al074486,
		F19276, F19560, N84316, N85047.
		AA641348, AA641489, AA095374.
		AA095772, AA167520, AA652050,
		AA654250, F21094, F21095,
		AA434414, AA434512, AA470088,
		AA471285, AA486483, AA669755,
		AA431412, AA431815, AA434279,
		F22216, AA776904, AA835523,
		AA844771, AA845270, AA846028,
		AA846115, AA788715, AA861511.
		AA989575, AI027165, AI090099,
		D19841
840759	Preferably excluded from the present invention are	R88018, N46360, N48866
1	one or more polynucleotides comprising a	
İ	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2182 of SEQ ID NO:504, b is an integer of 15 to	
1	2196, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:504, and where b is greater than or equal to a +	
0.407.40	14.	772701 772704
8407 60	Preferably excluded from the present invention are	[T73701. T73726, R09199, R09304,

	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to	R18652. R48578. R48679. R73134, H72715. H97957, N56993. N73552, W74357. W76552, AA278851.
	935 of SEQ ID NO:505, b is an integer of 15 to 949, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:505, and where b is greater than or equal to a + 14.	AA508168. AA508735. AA512928.
840770	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 351 of SEQ ID NO:506, b is an integer of 15 to 365, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:506, and where b is greater than or equal to a + 14.	
840781	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2045 of SEQ ID NO:507, b is an integer of 15 to 2059, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:507, and where b is greater than or equal to a + 14.	T50486. T50620. T92253. T92297. T75117. R13719. R20099. R20756, R24896. R32452. R38544. R39672, R66654. R67375. R71953. R80144, R80145. H09238. H09239, H49089, H49178. H79086. H79087. H81170, H82251. H82354, H94594. H98533, H98540. H98561. N23328. N32489, N33553. N34608. N34615. N35704, N36791. N37062. N45951. N46374, N52614. N55340, N77346, N91916, W24093, W32300, W44887. W52202. W69110, W69235, W93030, W92919, AA010331. AA010332. AA070031, AA070335. AA075063, AA075062, AA085451, AA102617, AA113366, AA113445, AA133629. AA136710. AA136808. AA151948. AA156555, AA157722, AA173681. AA181930, AA187541, AA187547, AA188217, AA186364, AA186932. AA459989, AA463983, AA464118, AA424144, AA424186, AA430453, AA216418. AA524319, AA535579. AA553797, AA582340, AA581875, AA586801, AA617881, AA579678, AA737057, AA736930, AA761601. AA807605. AA805212, AA809972. AA902407. AA902991, AA908502. AA916123, AA932301, AA947441. AA991523, N89110, N89294, C03132. AA093540. AA094654. AA149916. AA648245, AA447373, AA449202. AA598721. AA599096. AA670234. AA722507. AA779120. AA843601. AA844334, AA868803. AA906425, AA927243. A1021936. A1023003. A1022112, A1057609. A1073779. A1088646.

		AI093414, T17246, T16420.
		F01940, F02536, F03439, F05682.
		F06177, F06249, F04246, F07152.
840789	Preferably excluded from the present invention are	F07995
040709	one or more polynucleotides comprising a	H23265, AA250917, AA789157, AI033562, Z38280, F08582
	nucleotide sequence described by the general	A1033302, 238280, 1 08382
	formula of a-b. where a is any integer between 1 to	
1	1323 of SEQ ID NO:508, b is an integer of 15 to	
	1337, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:508, and where b is greater than or equal to a +	
	14.	
840790	Preferably excluded from the present invention are	H87973, H88155. N66473.
	one or more polynucleotides comprising a	AA143034, AA151105, AA528233,
	nucleotide sequence described by the general	AA584398, AA864579
	formula of a-b, where a is any integer between 1 to	
	717 of SEQ ID NO:509, b is an integer of 15 to	
	731. where both a and b correspond to the positions of nucleotide residues shown in SEQ 1D NO:509.	
	and where b is greater than or equal to $a + 14$.	
840791	Preferably excluded from the present invention are	H21100, H40810. R89801.
	one or more polynucleotides comprising a	AA563736, AA595316, AI056419
	nucleotide sequence described by the general	111303730, 1111373310, 111030117
	formula of a-b, where a is any integer between 1 to	
	930 of SEQ ID NO:510, b is an integer of 15 to	
	944, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:510,	
	and where b is greater than or equal to a + 14.	
840798	Preferably excluded from the present invention are	AA206675, T18945
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to 503 of SEQ ID NO:511, b is an integer of 15 to	
	517, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:511,	
1	and where b is greater than or equal to a + 14.	
840802	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
}	3637 of SEQ ID NO:512, b is an integer of 15 to	
	3651, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:512, and where b is greater than or equal to a +	
840803	Preferably excluded from the present invention are	T09262 B01276 B01777 1197604
040003		T98263, R01276, R01777, H87694, N46514, AA064627, AA064791.
		AA076077, AA076159, AA083580,
	, , , , ,	AA176354, AA186922, AA188542,
		AA192936, AA193132, AA234329,
	1	AA262890, AA284101, AA284046,
	positions of nucleotide residues shown in SEQ ID	AA827592, AA635005, AI015442,
		AI015761
	14.	
840809	Preferably excluded from the present invention are	
L	one or more polynucleotides comprising a	

	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 3301 of SEQ 1D NO:519, b is an integer of 15 to 3315, where both a and b correspond to the positions of nucleotide residues shown in SEQ 1D NO:519, and where b is greater than or equal to a + 14.	
840826	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 2347 of SEQ ID NO:520, b is an integer of 15 to 2361, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:520, and where b is greater than or equal to a + 14.	R12213, T79259, R52573, H90609, N34140, AA007443, AA126085, AA203195, AA251452; AA613266, D81536, Z24821
840827	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2507 of SEQ ID NO:521, b is an integer of 15 to 2521, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:521, and where b is greater than or equal to a + 14.	
840828	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1289 of SEQ ID NO:522, b is an integer of 15 to 1303, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:522, and where b is greater than or equal to a + 14.	T86672, T86764, T87773, T87774, R35654, R35761, H57667, H58507, N80737. W07534, W81050, W80799, W95751, W95521, AA040152, AA040816, AA070448, AA213733, AA461551, AA460625, AA471038. AA592998, AA662015, AA747769. AA827708, AA830241, AA393711. AA400724, F21899, A1023732. A1033332. A1089332
840829	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1086 of SEQ ID NO:523, b is an integer of 15 to 1100, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:523, and where b is greater than or equal to a + 14.	T55234, T53974, AA121362, AA121372, F17737, AA614605, AA662456, AA832106, AA939005, AA454502, AA629986, AA928745, AA993303, AI017897, AI052396
840831	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1949 of SEQ ID NO:524, b is an integer of 15 to 1963, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:524, and where b is greater than or equal to a + 14.	
840836		R76181, N28426, AA249749, AA249759

	780 of SEQ ID NO:525. b is an integer of 15 to 794, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:525, and where b is greater than or equal to a + 14.	
840837	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 2585 of SEQ ID NO:526, b is an integer of 15 to 2599, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:526, and where b is greater than or equal to a + 14.	T77944, R17636, H06632, W48792, W49617, AA121669, AA121741, AA876369, D80125, D79630, D79663, AA479160, AA773279, Z44214
840838		T64743, R14614, H22783, H41174. H80646, H80683, N55490, N69823, N70603, N76977, AA036760, AA054012, AA057377, AA837761, AA987287, W04922, AA393640, AA435678, AA447554, AA448537, AA447593, AA448073, AA448092, AI080255, AI095479
840841	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1617 of SEQ ID NO:528, b is an integer of 15 to 1631, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:528, and where b is greater than or equal to a + 14.	R11201, R11254, R36000, R36374, R70779, R70831, R73839, R73838, R77816, R78184, H00444, H00487, H12294, H12343, H22227, H25152, H41334, H41582, H67783, H83813, N20077, N23800, N66638, N94763, W42581, W42593, AA029286, AA053585, AA053749, AA056556, AA058414, AA102286, AA112945, AA158256, AA160853, AA463315, AA464245, AA464353, AA426154, AA428022, AA554874, AA555227, AA594755, AA569425, AA572786, AA687312, AA721147, AA826769, AA907442, AA989227, AA436199, AA436324, AA723705, M91501, AA971764, A1057365, A1088555, A1090085, A1095652, AA772791
840842	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1930 of SEQ ID NO:529, b is an integer of 15 to 1944, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:529, and where b is greater than or equal to a + 14.	
840843	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1411 of SEQ ID NO:530, b is an integer of 15 to 1425, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID	R07636, R07683, R56490, H15484, H57022, H99251, N21556, N22947, N29473, N33077, N40267, N41499, N44647, N54167, N62284, N67127, N77575, N79824, W72340, W73971, AA035483, AA035015, AA099228, AA136670, AA136786, AA514951, AA558780, AA581821,

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	14.	AA767243, AA806856, AA832308.
		AA922693, D79892, N56078,
		C14941, AA654492, AA477457.
		AA477583, AA495757, AA495817,
}		AA628697, AA628687, AA781710,
		A1004029, A1033065, A1076145.
010045	Durkantlannalidad kuru d	A1076166. A1080265. A1093765
840845	Preferably excluded from the present invention are	H85970, H86679, N54585, N76666,
	one or more polynucleotides comprising a	W79488, W94055, AA012907,
	nucleotide sequence described by the general	AA012992, AA018226, AA040388,
	formula of a-b. where a is any integer between 1 to	AA040483, AA235697, AA424720,
	1452 of SEQ ID NO:531, b is an integer of 15 to	AA424881, AA468337, AA468480,
	1466, where both a and b correspond to the	AA470354, AA505886. AA533304.
	positions of nucleotide residues shown in SEQ ID	AA535176, AA558028, AA565018.
	NO:531, and where b is greater than or equal to a +	AA568581, AA636065, AA569449,
	14.	AA570195, AA580697. AA580574,
	17.	
		AA769142, AA805257, AA857633,
		AA865266, AA974247, AA976018,
		AA983662, A1000909, A1074491,
		W94054, AA216680, AA283814.
		AA283815, AA293716, AA399618,
		AA411154, AA411153, AA430409,
		AA446547, AA446672, AA447405,
		AA447406, AA665639, Z19776,
		AA722802, AA776558, AA897739,
		AA773270, AI037944. AI056229,
		AI092063, Z39830, F02213,
		F04779, T65241, F12078, F09717
840847	Preferably excluded from the present invention are	T93496, T96330, R33735, R56168,
040047	one or more polynucleotides comprising a	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		N29545, N47832, N52709,
	nucleotide sequence described by the general	AA057861, AA057051. AA256421,
	formula of a-b, where a is any integer between 1 to	AA423938, AA502373, AA594835,
	1644 of SEQ ID NO:532, b is an integer of 15 to	AA837984, AA937125, AA988563,
	1658, where both a and b correspond to the	AA642808, C16798, AA653712,
	positions of nucleotide residues shown in SEQ ID	D11569, D11567, D11568, D11572,
	NO:532, and where b is greater than or equal to a +	AA759006
	14.	
840851	Preferably excluded from the present invention are	
• • • • • • • • • • • • • • • • • • • •	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2843 of SEQ ID NO:533, b is an integer of 15 to	
	2857, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:533, and where b is greater than or equal to a +	
	14.	
840853	Preferably excluded from the present invention are	T77874, T91147, T78073, T79015,
		H46575, H77369, N23303, N71319,
		N71370, W30700, W68080,
	formula of a-b, where a is any integer between 1 to	W69637, AA029698, AA085548,
	1	
		AA100651, AA100446, AA150243.
		AA150317, AA179448, AA181464,
	positions of nucleotide residues shown in SEQ ID	AA187866. AA192778. AA257060.
•	I.	AA257151, AA483459, AA633204,
		AA579660, AA744468, AA745238,
		AA806004, AA806728, AA831848,
		AA832183, AA916113, AA916084,

		AA919159, AA918478, AI000093, AA094194, AA478126, AA488653, AA486512, AA598836, AA723044, AA844019, AA852336, AA904410, AA969896, AI002026, AA694486
840854	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2804 of SEQ ID NO:535, b is an integer of 15 to 2818, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:535, and where b is greater than or equal to a + 14.	
840858	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1383 of SEQ ID NO:536, b is an integer of 15 to 1397, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:536, and where b is greater than or equal to a + 14.	
840859	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1219 of SEQ ID NO:537, b is an integer of 15 to 1233, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:537, and where b is greater than or equal to a + 14.	T93690, AA046782, AA047471, H70453, W22335
840863	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1002 of SEQ ID NO:538, b is an integer of 15 to 1016, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:538, and where b is greater than or equal to a + 14.	
840868		AA026007, AA053000, AA053532, AA078821, AA078789, AA126106, AA531460, AA553445, AA622619, AA877899, W63615, C03141, AA486740, C75022, AA682955, D25821
8408 69	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1066 of SEQ ID NO:540, b is an integer of 15 to 1080, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID	

	NO:540, and where b is greater than or equal to a +	
	14	
840870	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2245 of SEQ ID NO:541. b is an integer of 15 to 2259, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:541, and where b is greater than or equal to a +	
	14.	
840875		N47871, N51132, N79772,
	one or more polynucleotides comprising a	W07271, W40335, AA659745.
	nucleotide sequence described by the general	AA454850, AA455191, AA457737,
	F	AA480848
	1333 of SEQ ID NO:542, b is an integer of 15 to	
	1347, where both a and b correspond to the	·
	positions of nucleotide residues shown in SEQ ID	
	NO:542, and where b is greater than or equal to a +	
840876	Preferably excluded from the present invention are	H40365, N30582, N57227,
040070		AA099212, AA143504, AA429979,
		AA489199, AA490948, AA503094,
		AA515940, AA515972, AA526974,
		AA565952, AA832525, AA847119,
		AA975937, C16546, AA205184,
	•	AA446121, AA446243, AA446429,
	NO:543, and where b is greater than or equal to a +	AI093502, T25068
	14.	
840881		N31249, N33927, N49638,
		AA169623, AA885642, AA885643,
		AA995981, D80629, AA654491
	formula of a-b, where a is any integer between 1 to	
	828 of SEQ ID NO:544, b is an integer of 15 to	
	842, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:544,	
	and where b is greater than or equal to $a + 14$.	
840883	Preferably excluded from the present invention are	
040003	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	764 of SEQ ID NO:545, b is an integer of 15 to	
	778, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:545,	
	and where b is greater than or equal to a + 14.	
840886	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2128 of SEQ ID NO:546, b is an integer of 15 to	
	2142, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:546, and where b is greater than or equal to a + 14.	
840887	Preferably excluded from the present invention are	
10001	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
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	formula of a-b. where a is any integer between 1 to 1879 of SEQ ID NO:547. b is an integer of 15 to	
	1893, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:547. and where b is greater than or equal to a +	
	14.	
840891	Preferably excluded from the present invention are	AA011494, AA036641, AA040117,
	one or more polynucleotides comprising a	AA464582, AA229586, AA514441,
	nucleotide sequence described by the general	AA557363, AA605134, AA632063,
	formula of a-b, where a is any integer between 1 to	AA569111, AA731914, AA764872,
	616 of SEQ ID NO:548, b is an integer of 15 to	AA834230, AA865217, AA865800,
	630, where both a and b correspond to the positions	AA931605, AA975800, AA476216,
	of nucleotide residues shown in SEQ ID NO:548.	AA477563, AA664440, AA906128,
	and where b is greater than or equal to a + 14.	AA909907, AA994640. AI024748.
		AA701389
840892	Preferably excluded from the present invention are	T78188, H72434, H81179, N27050,
	one or more polynucleotides comprising a	N31296, N56740, N98857.
	nucleotide sequence described by the general	W92285, AA010281, AA017504,
	formula of a-b, where a is any integer between 1 to	AA018836, AA053984
	572 of SEQ ID NO:549, b is an integer of 15 to	
	586, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:549,	
	and where b is greater than or equal to a + 14.	
840894		R13791, R18500, R19446, R19717,
	one or more polynucleotides comprising a	R26638, R34992, R37650, R41499,
	nucleotide sequence described by the general	R44273, R44694, R49667, R41499,
		R44273, R44694, R49667, H10866,
		H21080, H21081, H24215, H24216,
		H56529, H82728, H83602, H97231,
		H98771, N23492, N25150. N28896,
	NO:550, and where b is greater than or equal to a +	N52055, N55071, N58330, N77279,
	14.	N77697, N80782, N80789,
		W68363, W68498, AA035669,
		AA063521, AA099156, AA099254,
		AA100828, AA115528, AA115527,
		AA122370, AA121425, AA134022.
		AA131828, AA131994, AA151142,
		AA151141, AA150051, AA150036,
		AA197292, AA234967, AA234148,
		AA252624, AA419370, AA425774,
		AA426238, AA429953, AA244068,
		AA244221, AA291229, AA508903,
		AA521037, AA521047, AA558219,
		AA639444, AA730255, AA738405,
		AA764865, AA769630, AA808135,
		AA866207, AA875854, AA886233,
		AA911989, AA912330, AA918110,
	l i	AA933817, AA960949, AA961737,
		AA970707, AA983973, AI084859,
		N87221, AA642352, C15736,
		AA095273, AA206988, AA649545,
		AA410978, AA443533, AA446839,
		AA599172, AA599632, AA625694,
		AA668705. AA678761. AA679282,
		AA843723, A1041402, A1041859, 🗍
		A1090256, Z40745, F03 5 94,
	1	F03920, F07349, F07665, F07689.

		D12052, AA702844
840896	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2129 of SEQ ID NO:551, b is an integer of 15 to 2143, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:551, and where b is greater than or equal to a + 14.	T70566. T70837. R34229. R77683. H72423. N70430. W78960. W80454. AA157568. AA425171. AI081752. AA450124. AA450190. AA479929, AA626156. AI023982. AI079467. D20574
840897	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1620 of SEQ ID NO:552, b is an integer of 15 to 1634, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:552, and where b is greater than or equal to a + 14.	R08644, AA085919, AA085920, AA112589, AA291296, AA531553, AA534454, AA610556, AA632339, AA826535, AA873598, AA973899, AI000209, W22275, AA642711, AA285014, AA290836, AA291785, AA487868, AA487869, AA598896, AA732931, D20744
840898	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 264 of SEQ ID NO:553, b is an integer of 15 to 278, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:553, and where b is greater than or equal to a + 14.	
840904	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2644 of SEQ ID NO:554, b is an integer of 15 to 2658, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:554, and where b is greater than or equal to a + 14.	
840905	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1714 of SEQ ID NO:555, b is an integer of 15 to 1728, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:555, and where b is greater than or equal to a + 14.	
840908	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 3341 of SEQ ID NO:556, b is an integer of 15 to 3355, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:556, and where b is greater than or equal to a + 14.	
840909		N26769, N30855, N91934, W17097, W76127, AA010929, AA011317, AA026824, AA026957,

	formula of a-b. where a is any integer between 1 to 1065 of SEQ ID NO:557, b is an integer of 15 to 1079, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:557, and where b is greater than or equal to a + 14.	AA065084. AA064997. AA113980. AA113972. AA187311. AA187412. AA491244. AA503832. AA527886. AA603076. AA767201. AA768552. AA806008, AA857130. AA862053. W69334, N90880. AA285256. AA853981. AA971357, A1015443. A1037999, A1089498. F04542
840910	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 710 of SEQ ID NO:558, b is an integer of 15 to 724, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:558, and where b is greater than or equal to a + 14.	
840912	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 3111 of SEQ ID NO:559, b is an integer of 15 to 3125, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:559, and where b is greater than or equal to a + 14.	T89929, T97560, T97607, T98767, T98768, R75684, R76638, H29662, R91419, H63674, H84562, N22625, N23668, N59616, N67124, N75308, N78169, W04760, W15411, W15522, W31605, W39524, AA007425, AA007426, AA044991, AA044990, AA161382, AA161383, AA190884, AA190852, AA195140, AA195346, AA195347, AA278498, AA515881, AA523692, AA557400, AA579985, AA732611, AA813932, A1053747, D80095, D80559, D80940, D82547, D82557, D82494, C01801, R29401, AA404683, AA404214, AA634226, AA456641, AA812584, AA884056, A1004948, A1033808, A1038706, A1073466, D20935, Z40790, Z45057, F02232, F05993, AA700153, AA700480
840916	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2631 of SEQ ID NO:560, b is an integer of 15 to 2645, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:560, and where b is greater than or equal to a + 14.	
840917	one or more polynucleotides comprising a	H30515, H58512, AA428216, AA429793, AA888482, AA402294, AA478415, AA665865, AI079558
	one or more polynucleotides comprising a	T63366, T63794, T63819, T72173, T72951, T74098, T74471, R40321, R54813, R40321, H28292, H87420.

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	formula of a-b, where a is any integer between 1 to	H96805, H99895, H99896, N21575,
	2403 of SEQ ID NO:562, b is an integer of 15 to	N26498, N35550, N35899, N43971.
	2417, where both a and b correspond to the	N46316. N50289, N62230. N67269,
	positions of nucleotide residues shown in SEQ ID	N67736. N79322, W03582,
	NO:562, and where b is greater than or equal to a +	W20379, W35114, W93987,
	14.	W93993, W93961, AA002131,
		AA002085. AA010861, AA010895,
		AA032150. AA039874, AA046207,
		AA046213. AA075922, AA076246,
		AA076245, AA082698, AA100666,
		AA100665. AA102690, AA101322,
		AA115198. AA115199, AA127068,
		AA125791. AA130142, AA130164,
		AA160133, AA160152, AA181132,
		AA223399, AA223717, AA223794,
		AA225618. AA225617, AA225893,
		AA226087, AA281188, AA467866,
		AA532633. AA548553, AA548715,
		AA565709. AA595388. AA604287,
		AA610139. AA574387. AA574403.
		AA576771. AA827594, AA857936,
		AA862174, AA886789, AA894576,
		AA933053, AA961640, AA962084,
		AA971648, Al017658, Al089036,
		U48642, A1084032, W29098,
•		AA041518, AA206338, AA206730,
		AA204730, AA218606, AA285284,
		AA293327, D11555, AA450117,
		AA626655, AA666366, AA679791,
		AA844183, AA883770, AA904568,
		AA904956, AA913275, AA913772,
		Z39779, F06739, F07232
840922	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1530 of SEQ ID NO:563, b is an integer of 15 to	
	1544, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:563, and where b is greater than or equal to a +	
0.10000	14.	
840923	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2285 of SEQ ID NO:564, b is an integer of 15 to	
	2299, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:564. and where b is greater than or equal to a +	
0.4000=	14.	
840927	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	350 of SEQ ID NO:565, b is an integer of 15 to	
	364, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:565.	1

	and where b is greater than or equal to a + 14.	1
840928	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 2467 of SEQ ID NO:566, b is an integer of 15 to 2481, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:566, and where b is greater than or equal to a + 14.	R52991. R52992. AA075795. AA236859. AA237058. AA258294. AA490530. AA582199. AA594981. AA768625, AA918784. AA400122. AA400211. AA599540. AA620310. AA757241, AA853706. Z44647
840929	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1350 of SEQ ID NO:567, b is an integer of 15 to 1364, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:567, and where b is greater than or equal to a + 14.	T65391, T65468, T82268, T83555, R23120, R23121, H05767, H15242, H15243, N27484, N75846, W07429, W55965, W55966, W69486, W69610, AA024480, AA024481, AA035363, AA035364, AA036732, AA045784, AA045785, AA054537, AA054576, AA05867, AA081962, AA082833, AA122107, AA122108, AA160026, AA506569, AA582633, AA593717, AA593757, AA596048, AA741487, AA830268, AA834091, AA917654, AA922770, AA948018, C00527, AA648362, AA448872, AA447937, AA708846, AA769947, AA775569, AA835167, A1090227, F02032, F11824, F09473
840930	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1592 of SEQ ID NO:568, b is an integer of 15 to 1606. where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:568, and where b is greater than or equal to a + 14.	T66390, R13067, R20192, R40498, R44978, R54122, R40498. R44978, R55825, R55910, R56182, H05938, H10239, H13040, H22780, H22987, H26826. H28018, R84898. R85844, N48284, N49013, W59970, AA029938, AA030050, AA037606, AA040869, AA043138, AA147575, AA152015, AA152022, AA152089, AA152096, AA150150, AA152219, AA156446, AA429964, AA470402, AA528114, AA594982, AA595134, AA886444, AA972352, F18878, C04576, AA090702, C16326, AA649510, AA211287, AA211332, AA443358, AA446384, AA666350, AA993887, AI032649, AI096674, Z24984, Z25108, Z25360, Z33590, T25134, Z37011, F12229, F00286, F09858
840931	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1371 of SEQ ID NO:569, b is an integer of 15 to 1385, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:569, and where b is greater than or equal to a + 14.	AA164298, AA164299, AA215696, AA553729, AA600053

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840941	Preferably excluded from the present invention are	T71972, T72113, N66952.
	one or more polynucleotides comprising a	AA037833, AA037834, AA503937.
	nucleotide sequence described by the general	AA514259. AA568671, C04493.
	formula of a-b, where a is any integer between 1 to	AA400259. AA703387. AA897154.
	1130 of SEQ ID NO:570, b is an integer of 15 to	AA905309. AA991791. AI091736.
	1144, where both a and b correspond to the	A1097161, AA699338, AA699546
	positions of nucleotide residues shown in SEQ ID	1 1077101.7111077330.7171077340
	NO:570, and where b is greater than or equal to a +	
	14.	
840944	Preferably excluded from the present invention are	R53077, R53166, N66228, N66588.
""	one or more polynucleotides comprising a	N98299, N98791, W52420,
	nucleotide sequence described by the general	W58722, AA054166, AA102647.
	formula of a-b, where a is any integer between 1 to	
	2740 of SEQ ID NO:571, b is an integer of 15 to	AA101300, AA224382, AA224448.
		AA504618, AA504713, AA505965,
	2754, where both a and b correspond to the	AA577583, AA766244, AA837194,
	positions of nucleotide residues shown in SEQ ID	AA936390, AA938580, AA969268,
		AI056953, Z25291, Z28894.
	14.	T25120
840945	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2643 of SEQ ID NO:572, b is an integer of 15 to	
	2657, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:572, and where b is greater than or equal to a +	
	14.	
840948	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2338 of SEQ ID NO:573, b is an integer of 15 to	
	2352, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:573, and where b is greater than or equal to a +	
	14.	
840949	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	,
	314 of SEQ ID NO:574, b is an integer of 15 to	
	328, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:574,	
	and where b is greater than or equal to $a + 14$.	
840953	Preferably excluded from the present invention are	
CCCOFO	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1664 of SEQ ID NO:575, b is an integer of 15 to	
	1678, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:575, and where b is greater than or equal to a +	
0.400.5.	114.	
840954		T70122, R01105, R01854, R26511,
		R50976, W39281, W88823,
		AA190914. AA220964, AA223912,
	formula of a-b, where a is any integer between 1 to	AA224067. AA292591. AA516293.

	2494 of SEQ ID NO:576. b is an integer of 15 to 2508, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:576, and where b is greater than or equal to a + 14.	AA888082. AA093864. AA644303. AA668429. AA680062. AA705885. Z25045. Z25169. Z28742. Z40110. F06996. F00269
840958	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1517 of SEQ ID NO:577, b is an integer of 15 to 1531, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:577, and where b is greater than or equal to a + 14.	T92026. T92127. T96602. T99639. R07023. R70248. R74432. H24617. H25443. H25488. H25814. H39512. H49218, H49404. H85371. H98480. N21621. N28860. N32291. N44577, N93796. W19136. W46407. N89924. AA252381. AA252643, AA230168. AA251928. AA252509. AA280831. AA281028. AA570114. AA570316. AA688054. AA731686, AA731363. AA737178. AA743784. AA761782. AA805326. AA806145. AA806698. AA807626. AA810694. AA811702. AA857654. AA903433. AA947731. AA976482. AA977020. D80646. AA448459. AA722871, AA834947, AA844661. AA868828. AA912953. AA971589, A1032540, A1093489. Z33450
840960	1230 of SEQ ID NO:578, b is an integer of 15 to 1244, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID	R80950, R81055, H17096, H17714, H21600, H28031, H39514, N25283, N48074, N93030, N93491, AA005164, AA005250, AA037756, AA039247, AA062857, AA062864, AA159264, AA461323, AA482290, AA523938, AA548271, AA602298, AA612800, AA580232, AA878960, AA954638, AA983694, AA948176, AA452852, AA452868, AA628205, AA629208, AA707757, AA884020, A1086383, A1092362, AA952907, F03951, F04326, F07686
840968	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2511 of SEQ ID NO:579, b is an integer of 15 to 2525, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:579, and where b is greater than or equal to a + 14.	
840969	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 3992 of SEQ ID NO:580, b is an integer of 15 to 4006, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:580, and where b is greater than or equal to a + 14.	
840972	Preferably excluded from the present invention are one or more polynucleotides comprising a	

	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	551 of SEQ ID NO:581, b is an integer of 15 to	
	565, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:581.	
	and where b is greater than or equal to a + 14.	
840973	Preferably excluded from the present invention are	T92934, T93051, T95827, T95922.
	one or more polynucleotides comprising a	R01416. R01417, R14186, R40475,
	nucleotide sequence described by the general	R40475, R62217, H02303, H02413,
	formula of a-b, where a is any integer between 1 to	N91928, N92794, W19380,
	2514 of SEQ ID NO:582, b is an integer of 15 to	W24105, W24106, W92317,
	2528, where both a and b correspond to the	W92353, AA009695, AA009414.
	positions of nucleotide residues shown in SEQ ID	AA016232, AA022718, AA022810,
	NO:582, and where b is greater than or equal to a +	AA031668, AA031669, AA135522,
	14.	AA135584, AA233766, AA233817,
		AA468889, AA502015, AA514448,
		AA524548, AA613782, AA740659,
		AA831839, AA856642, AA865523,
		AA933090, AA937529, AA937525,
		AA995177, D45313, D80956,
		C04688, AA642850, C15075,
		C15074. AA652169. AA404513,
		AA485401, AA485562, AA626502,
		AA703641, AI014270, AI027694,
		A1052552, A1080105, A1094104,
		Z24781, Z28475, D20204,
840975	Preferably excluded from the present invention are	AA699913 AA187971, AA491557
040973	one or more polynucleotides comprising a	AA187971, AA491557
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	493 of SEQ ID NO:583, b is an integer of 15 to	
	507, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:583,	
	and where b is greater than or equal to a + 14.	
840978	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1917 of SEQ ID NO:584, b is an integer of 15 to	
	1931, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:584, and where b is greater than or equal to $a + y$	
	14.	
840980		T91979, T85031, R51511, H08105,
		H14962, H84344, H95886, N67113,
		AA001485, AA033681. AA045053,
		AA045054, AA460816, AA548181,
		AA602217, AA627119, AA919072,
		N85463, AA090718, AA090747,
		AA205839, AA215860, AA889349,
		AI005058, AI051749
	14.	
840982	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	l	
	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to	

	752 - 6670 ID NO 506 1 : : : : : : : : : : : : : : : : : :	
	753 of SEQ ID NO:586, b is an integer of 15 to	
	767. where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:586.	
21000	and where b is greater than or equal to a + 14.	
840985	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 833 of SEQ ID NO:587, b is an integer of 15 to 847, where both a and b correspond to the positions	AA469388, AA469387, AA579307, AA838301
	of nucleotide residues shown in SEQ ID NO:587, and where b is greater than or equal to a + 14.	
840989	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2144 of SEQ ID NO:588, b is an integer of 15 to 2158, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:588, and where b is greater than or equal to a + 14.	T56570. T56419, T74072, H02553, H02636, H05217, H28221, H28270, H53671, N24892, N26327, N36312, N39771, N43761, W19923, N91268, AA132017, AA132120. AA195204, AA195313, AA196452, AA196696, AA227654, AA232501, AA232165, AA429770, AA281620, AA281676, AA468179, AA515887, AA533678, AA551958, AA639446, AA577363, AA579740, AA721360, AA729621, AA769527, AA814423, AA826344, AA903583, D81898, D81970. C04597, AA216528, AA216535, AA442781, AA452285, AA452436, AA709278, AA718938, AA771705, AA771724, AA868151, AA993850, AI033921, Z32830, AA952909, F11180, F11002, F11632
840991	2285 of SEQ ID NO:589, b is an integer of 15 to	T81125, N29118, N36444, N46478, AA169588, AA169707, AA190390, AA197190, AA465591, AA569663, AA572882, AA927990, A1031844, W26259, W26429, W27367, W27994, W28877, AA453067, Z39013, Z42882
840996	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2166 of SEQ ID NO:590, b is an integer of 15 to	R11816, T80577, R18182, R55973, R59293, R61044, H08547, H08548, H16428, AA001999, AA001722, AA181466, AA181638, AA530935, AA811299, AA774853, AA853584, T48535
840997	Preferably excluded from the present invention are one or more polynucleotides comprising a	H81891, N27695. AA242758, AA242898. AA262282, AA463638, AA443047. AA677853

	NO:591, and where b is greater than or equal to a +	
	14.	
840998	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1988 of SEQ ID NO:592, b is an integer of 15 to 2002, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:592, and where b is greater than or equal to a + 14.	H39956. R95173. N21653. N59206. AA126765. W25859. AA126814. AA411155. AA479348. AA663608. AA723137. AA904646. AA936314
840999	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1000 of SEQ ID NO:593, b is an integer of 15 to 1014, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:593, and where b is greater than or equal to a + 14.	T59001, R38613, AA558946, D80113, AA628765, AA931368, AI087859, AI087860, AI088020, AI088042, AI088041, Z41502, T59074, F10347
841000	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 319 of SEQ ID NO:594, b is an integer of 15 to 333, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:594, and where b is greater than or equal to a + 14.	T63281
841002	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1106 of SEQ ID NO:595, b is an integer of 15 to 1120, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID	N75236, N79007, W33128, AA044565, AA192107, AA194732, AA430142, AA602405, AA732494, AA730246, AA767992, AA836339, AI083657, AA206755, AA205076, AA649037, AA446467, AA722661, AA993269, AA994380, AI005394, AI032012
841003	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 518 of SEQ ID NO:596, b is an integer of 15 to 532, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:596, and where b is greater than or equal to a + 14.	N50091, W78173, W79236, AA758361, AA992853
841008	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1480 of SEQ ID NO:597, b is an integer of 15 to 1494, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:597, and where b is greater than or equal to a + 14.	T71281, T71345, T77436, R08136, R08137, R20906, R21385, R22903, R39269, R43069, R46481, R51904, R52702, R43069, R46481, R43120, R79482, H13227, H18911, H19203, H65049, H65050, H94075, H96326, H96721, N21076, N21154, N21166, N23977, N34347, N42814, N73453, N93204, W02856, W20197, W38726, W38956, W56890, N90551, AA007554, AA037417, AA040911, AA116130, AA116131,

		AA169544. AA169728. AA169445.
		AA173030, AA210740, AA211832.
		AA211833. AA420515. AA420563.
		AA420747, AA420808, AA459156,
		AA469336. AA480571. AA548615.
		AA554507. AA554716. AA559111.
		AA594680, AA602634, AA568997,
		AA857653, AA938636, AA962481,
		AA969819, AA988963, C01221,
		N87866, N88166, C06426, C16205,
		C16225, C16262, C16328, C16346,
Ì		C16567, AA093646, AA094628.
-		AA215845, AA248299, AA450084,
		AA450101, AA450141, AA450164,
		AA452926, AA453098, AA677261,
	·	AA704706, AA776452, AA782448,
		AA905622, AI024304, AI027088,
041012	D C 11 11 1 1 C 1	T10244. T24104, F10814
841013	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2174 of SEQ ID NO:598, b is an integer of 15 to	
	2188, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:598, and where b is greater than or equal to a +	
<u> </u>	14.	
841014	Preferably excluded from the present invention are	R13850, R36993, R40384, R49290,
	one or more polynucleotides comprising a	R49290, R70449, H20581, H22501,
	nucleotide sequence described by the general	H41342, W52797, W63724,
	formula of a-b, where a is any integer between 1 to	AA026917, AA149462, AA223955,
	1259 of SEQ ID NO:599, b is an integer of 15 to	AA232557, AA416604, AA282009,
	1273, where both a and b correspond to the	AA284187, AA534348, N83640,
	positions of nucleotide residues shown in SEQ ID	W28199, AA641025, AA652459,
	NO:599, and where b is greater than or equal to a +	AA707275, D19833
	14.	
841015	Preferably excluded from the present invention are	T60712, T39204, T40475, T89115,
	one or more polynucleotides comprising a	R23975, R42835, R50864, R42835,
	nucleotide sequence described by the general	R80780, R80929, R80980, R81030,
	formula of a-b, where a is any integer between 1 to	R81287, H45854, R85410, H85126,
	1225 of SEQ ID NO:600, b is an integer of 15 to	H85165, H86110, H92458, H92459,
	1239, where both a and b correspond to the	H96689, N45682, N48966, N64273,
	positions of nucleotide residues shown in SEQ ID	N67340, W38863, W60856,
	NO:600, and where b is greater than or equal to a +	W73806, W79809, W79590,
	14.	AA031812, AA031892, AA039603,
		AA056740, AA058411, AA069773,
		AA069809, AA127774, AA133361,
		AA150512, AA186437, AA188784.
		AA215296, AA236042, AA250827,
		AA250884, AA258206, AA459963,
		AA480598, AA484831. AA524510,
		AA554692, AA627856, AA633499,
		AA633500, AA573552. AA577009,
		AA661865, AA838393, AA838126,
		AA872284, AA888617, AA954248,
		AA972651, AA974294. AA978242,
		p == = / / ~ / ン 1
		A1000986, N84928, W28888,

		AA093374, AA095419, AA649576.
		AA447092, AA628724, AA635022.
		AA635099. AA708921. AA782622.
		AA845435. AA852359. AA283454.
į		AA860493. AA905955, AI015482,
		A1033996, A1057611. A1041421,
		A1097090, T15984, F04083,
		F04704, AA693482
841018	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
1	1272 of SEQ ID NO:601, b is an integer of 15 to	
1	1286, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	i e
	NO:601, and where b is greater than or equal to a +	
	14.	·
841019	Preferably excluded from the present invention are	AA248515
]	one or more polynucleotides comprising a	1.12.105.15
}		
1	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	390 of SEQ ID NO:602, b is an integer of 15 to	
	404, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:602,	
	and where b is greater than or equal to a + 14.	
841024	Preferably excluded from the present invention are	
0.102	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1154 of SEQ ID NO:603, b is an integer of 15 to	
	1168, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:603, and where b is greater than or equal to a +	
	14.	
841025	Preferably excluded from the present invention are	AA188466
011020	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	444 of SEQ ID NO:604, b is an integer of 15 to	
	458, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:604,	
	and where b is greater than or equal to a + 14.	
841026	Preferably excluded from the present invention are	N72911, AA148215, AA166925,
		AA228038, AA228148, AA483775,
		AA504475, AA740596, AA742681,
		1
		AA808693, AA811844, AI054163,
		D12456, D12055, AA446237,
		AA599068, AI075720
	of nucleotide residues shown in SEQ ID NO:605,	
	and where b is greater than or equal to a + 14.	
841027	Preferably excluded from the present invention are	H41598, H62017, H69575, H69596,
	· ·	H84745, H95065, N36218, N54430,
	, , ,	N80053, W52484, AA010201,
		AA235462, AA513394, AA559062.
		H84833, AA574343, AA835915,
		AA872643, AA877236
	of nucleotide residues shown in SEQ ID NO:606.	

	Land and the second sec	
011//20	and where b is greater than or equal to a + 14.	
841029	Preferably excluded from the present invention are	T50950, T40351, T41210, T64654.
	one or more polynucleotides comprising a	T99782. T99883. R12658. R20557.
	nucleotide sequence described by the general	R48599, R48701, R20557, H10512
	formula of a-b. where a is any integer between 1 to	, , , , , , , , , , , , , , , , , , , ,
	1334 of SEQ ID NO:607, b is an integer of 15 to	H54291. H54369. H57072. H57073
	1348, where both a and b correspond to the	H70169, H81838, H89935, H91980
	positions of nucleotide residues shown in SEQ ID	N26532, N26640, N35643, N39712
	NO:607, and where b is greater than or equal to a +	, , , , , , , , , , , , , , , , , , , ,
	14.	N66762. N68174, N73964. N80633
		N93213, N93218, N94936,
		W19558, W19581, W20315,
		W33192, W37258, W38673.
		W38998, W38807, W39086,
		W44806, W49655, W49729,
		W52842, W56034, W56019,
		W72523, W96449, W96546,
		N90712, AA022694, AA022787.
		AA033992, AA033993, AA055233
		AA128163, AA125976, AA151620
		AA228010, AA234230, AA235616
		AA460804, AA428125, AA428126
		AA244254, AA244044, AA282782
		AA459422. AA465647, AA514260,
		AA524819, AA526652, AA527010
		AA557557, AA593780, AA594299,
		AA604168, AA612788, AA622842,
		AA639066, AA729180, AA730491,
		AA737387, AA814201, AA847016,
		AA872392, AA873523, AA885963,
		AA902850, AA946931, AA968795,
		AA974320, AA977816, AI094935,
		AA642338, AA093758. AA094834,
		AA650022, AA248350, AA402422,
		AA446745, AA449102, AA449538,
		AA482267, AA431490, AA431697,
		AA432060, AA706083, AA706225,
		AA723554, AA724604, AA732823,
		AA772101, AA772330, AA781604,
		AA782387, AA843140, AA843480,
		AA843756, AA846144, AA846155,
		AA845500, AA854399, AA855096,
		AA860829, AA888776, AA889009,
		AI023231, AI028453, AI031906,
		AI031928, AI038365, AI051907,
		AI050990, AI056013, AI066647,
		AI073764, AI074709, AI076720,
		AI077283, AI040402, AI087021,
		AI088075, AI087912, AI092000,
		AI091592, AI092431, AI092579,
		AI095442. D20747, F05340,
		AA694556
	Preferably excluded from the present invention are	Т85016
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
i	formula of a-b. where a is any integer between 1 to	
	708 of SEQ ID NO:608, b is an integer of 15 to	

	722, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:608,	
	and where b is greater than or equal to a + 14.	
841031	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	316 of SEQ ID NO:609, b is an integer of 15 to	
	330, where both a and b correspond to the positions	
-	of nucleotide residues shown in SEQ ID NO:609.	
	and where b is greater than or equal to a + 14.	
841034	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
1	1852 of SEQ ID NO:610, b is an integer of 15 to	
	1866. where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:610. and where b is greater than or equal to a +	
	14.	
841036	Preferably excluded from the present invention are	
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2162 of SEQ ID NO:611, b is an integer of 15 to	
	2176, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:611, and where b is greater than or equal to a +	
	14.	
841039	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	:
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	3605 of SEQ ID NO:612, b is an integer of 15 to	
	3619, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:612, and where b is greater than or equal to a +	
	14	<u> </u>
841040	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1413 of SEQ ID NO:613, b is an integer of 15 to	
	1427, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:613, and where b is greater than or equal to a +	
	14.	
841048		N69349, W37995, W37996,
	one or more polynucleotides comprising a	AA099842, AA129834, AA134879,
	nucleotide sequence described by the general	AA136131, AA136101, AA213847,
	formula of a-b, where a is any integer between 1 to	AA278288, AA278834, AA639630,
	1419 of SEQ ID NO:614, b is an integer of 15 to	AA743611, AA745858, AA765478,
	1433, where both a and b correspond to the	AA829501, AA830648, AA837909.
	positions of nucleotide residues shown in SEQ ID	AA877341, AA887480, AA910616,
	· ·	C01321. AA134878, AA410913,
		AA441809, AA441871, AA447551,
<u> </u>		AA679476, F13794

841049 841050	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 492 of SEQ ID NO:615, b is an integer of 15 to 506, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:615, and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2160 of SEQ ID NO:616, b is an integer of 15 to	R13856. R36998, H88745, H88749. H88750. H88744, H88745, H88750. N20597. N27562, N28993. N40383, W23671. W42418. W42515, AA017276, AA054535, AA0454527,
	2174. where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:616, and where b is greater than or equal to a + 14.	AA081056, AA083641, AA165258, AA165257, AA195316, AA195497, AA504774, AA731655, AA743407, AA827654, AI074376, AA096064, AA677874, AI049801, T10385, D31353, AA700430
841052	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 3133 of SEQ ID NO:617, b is an integer of 15 to 3147, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:617, and where b is greater than or equal to a + 114.	
841054	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2515 of SEQ ID NO:618, b is an integer of 15 to 2529, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:618, and where b is greater than or equal to a + 114.	
841055		T86070
841056	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1721 of SEQ ID NO:620, b is an integer of 15 to 1735, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:620, and where b is greater than or equal to a +	T65020, T66102, T74444, R12529, R36487, R36488, R37425, R52082, R52176, N58833, N75250, AA573305, AA687450, AA687507, AA810182, AA815088, AA908253, AI084103, AA489756, AA844081, AA844438, AA854762, AA897722, F11861, F12468, T83267, F09506, F10088
841060	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general	

,		
	formula of a-b. where a is any integer between 1 to	
	1012 of SEQ 1D NO:621, b is an integer of 15 to	
	1026, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:621, and where b is greater than or equal to a +	
	14.	
841061	Preferably excluded from the present invention are	W47450, AA491124
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	656 of SEQ ID NO:622. b is an integer of 15 to	
	670, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:622,	
	and where b is greater than or equal to a + 14.	
841062	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	2149 of SEQ ID NO:623, b is an integer of 15 to	
	2163. where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:623, and where b is greater than or equal to a +	
	14.	
841063	Preferably excluded from the present invention are	AA227288, AA282718
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	587 of SEQ ID NO:624, b is an integer of 15 to	
1	601, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:624,	
	and where b is greater than or equal to $a + 14$.	
841067	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	579 of SEQ ID NO:625, b is an integer of 15 to	
İ	593, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:625,	
	and where b is greater than or equal to a + 14.	
841074		T39947, T40903, T90518, T90617,
	one or more polynucleotides comprising a	T86882, T86883, R11373, T79972,
	nucleotide sequence described by the general	T83358, T83504, R16291, R18540,
		R18728, R21852, R21872, R32969,
		R33513, R34056, R35153, R37578,
		R41528, R42089, R50812, R41528,
		R42089, R63072, R63114, R66886,
		R68286, R68328, R77261, R77305,
		H04160, H04159, H09820, H09915,
		H11374, H11399, H11475, H11580,
		H20564. H20656, H20724, H20725,
		H45913. R87571, H71492, H71493,
		H77970, H77971, H85921, H95617,
	1	H97011, H97137, H97973, H99201,
		H99869. N20626. N21042, N23341,
		N23509. N27621, N27863, N28554,
		N28813. N33434. N35711, N36525,
		N40636. N42409. N50418. N50473.
		

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N55217. N55526. N77009. W15345, W31916, W39297, W39437, W40562, W40586, W52515. W56373, W56584. W56673, W56738, W60072, W73328. AA001060. AA001061. AA001355, AA012936, AA013022, AA020854, AA021013, AA021245, AA021350, AA041249, AA044791, AA057517, AA070118, AA081114, AA081289, AA081518, AA081758, AA081654, AA081910, AA081807, AA083386, AA083520, AA084143, AA084169, AA084637, AA102204, AA101101, AA112305, AA112273. AA113158, AA113205, AA113234, AA113290, AA112514, AA114269, AA114292, AA121997, AA121998, AA122357, AA122358, AA127073, AA125796, AA134357, AA134635, AA148203, AA148204, AA148658, AA148659, AA156277, AA156388, AA158662, AA159027, AA160336, AA159855, AA160818, AA176261, AA176262, AA181259, AA182937, AA187516, AA186906, AA186943, AA210754, AA211829, AA223289, AA223297, AA223271, AA223898, AA223866, AA223865, AA223930, AA224002, AA226834, AA227007, AA251494, AA464562, AA464663, AA282038, AA282381, AA282799, AA282890, AA454945, AA455324, AA459366, AA459591, AA471068, AA493188, AA506956, AA515184, AA525415, AA528016, AA531574, AA557548, AA559080, AA558**7**94, AA601508, AA602820, AA604093, AA580330, AA665041, AA688154, AA714131, AA721076. AA729400, AA730738, AA736940, AA745800, AA746251, AA747771, AA749097, AA761791, AA765245, AA769486, AA810468, AA809803, AA815070, AA815124, AA825529, AA827628, AA827818, AA830566, AA831651, AA832026, AA836109, AA856618, AA858034, AA862500, AA908700, AA916911, AA923104, AA911251, AA922814, AA948643, AA975963, AA976127, AA988496, AA995369, AI015981, D82125, N85599, N85825, W60998, N87121, N88156, C05715, C05853, AA046846, AA641779, AA070117, C20828, C21327, AA159483, AA206049, AA206104, AA206105,

		AA206439, AA206436, AA206529, AA206577, AA206641, AA205227, AA205214, AA205483, AA205488, AA205554, AA205495, AA205683, AA205707, AA205655, AA648896, AA649019, AA211090, AA211201, AA219240, AA219379, AA248392, AA263057, AA436015, AA436120, AA444131, AA449168, AA485456,
		AA488660, C74998, C75053, C75178, C75578, C75650, AA598408, AA600229, AA633997, AA664255, AA670477, AA456958, AA457067, AA457333, AA707431, AA708046, AA708052, AA722286, AA679711, AA774733, AA776895, AA778320, AA782343, AA852970, AA852969, AA853367, AA854017, AA884081, AA913264, AI003524, AI003161, AI061383, AI079587, AI080214, AI085729, AI088540,
		A1088599, T10660, T11369, T16057, T17106, Z41696, T16213, T27465, F01519, F02134, T54069, F07296, F13614, F13652, AA702026
841076	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 857 of SEQ ID NO:627, b is an integer of 15 to 871, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:627, and where b is greater than or equal to a + 14.	
841081	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 765 of SEQ ID NO:628, b is an integer of 15 to 779, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:628, and where b is greater than or equal to a + 14.	H80595, N66964, W60868, W60944, AA554024, AA581858, AA603775, AA569390, AA721420, AA730838, AA746990, AA764955, AA824533, AA886662, AA902151, AA922977, AA931633, AI004155, C17761, AA643235, AA249456, AA401851, AA447213, AA769929, AA861067, AA868853, AI001993, AI038228, AI080577, D12310, AA699302, AA700733
841083	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1821 of SEQ ID NO:629, b is an integer of 15 to 1835, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:629, and where b is greater than or equal to a + 14.	
841089	one or more polynucleotides comprising a	T97583, H27459, H28283, H30123, H30163, H40493, H64399, H99038, N20188, N29090, W24593,

	formula of a-b. where a is any integer between 1 to 1083 of SEQ ID NO:630, b is an integer of 15 to 1097, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:630, and where b is greater than or equal to a ± 14.	W47194. W47309. W51990. W52638. W56428. W56312. W73795. W78984. W80386. W85832. W87763. W87679. W93594. W93490. AA010192. AA010091. AA229878. AA230283. AA508851. AA553908. H64447. AA582764. AA805299. AA877051. AI053512. AI053734. AI054001, AI054092. AI054119. AI054274. AI054309. AA758790. AA972288, AI028150. AI077801. AI092052, D20235. T97631
841093	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1523 of SEQ ID NO:631, b is an integer of 15 to 1537, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:631, and where b is greater than or equal to a + 14.	
841097	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1887 of SEQ ID NO:632, b is an integer of 15 to 1901, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:632, and where b is greater than or equal to a + 14.	
841098	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1736 of SEQ ID NO:633, b is an integer of 15 to 1750, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:633, and where b is greater than or equal to a + 14.	T39572, R32405, R78435, R82780, H01823, W23901, AA705025
841101	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1912 of SEQ ID NO:634, b is an integer of 15 to 1926, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:634, and where b is greater than or equal to a + 14.	R11755, R12465, R23435, R54254, H10274, N31847, W63594, AA488942, AA581018, AA767423, N56490, W26165, N87429, AA093862, Z41898
841113	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1332 of SEQ ID NO:635, b is an integer of 15 to 1346, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:635, and where b is greater than or equal to a +	

	14.	
841115	Preferably excluded from the present invention are	
071113	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	1570 of SEQ ID NO:636, b is an integer of 15 to	
	1584, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:636, and where b is greater than or equal to a +	
841116	Preferably excluded from the present invention are	
041110	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1649 of SEQ ID NO:637, b is an integer of 15 to 1663, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:637, and where b is greater than or equal to a +	
	114.	
841117	Preferably excluded from the present invention are	
04111/	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	<u> </u>
	formula of a-b, where a is any integer between 1 to	
	3933 of SEQ ID NO:638, b is an integer of 15 to	
	3947, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:638, and where b is greater than or equal to a +	
	14.	
841125		R40268, R40268, R60037, H05829
011123	one or more polynucleotides comprising a	H71311, H71355, H94227, N30711
	nucleotide sequence described by the general	N56686, W70033, W80987,
	formula of a-b, where a is any integer between 1 to	W94564, W92648, AA036715.
	1413 of SEQ ID NO:639, b is an integer of 15 to	AA043642, AA045098, AA045127
	1427, where both a and b correspond to the	AA057355, AA070703, AA150080
	positions of nucleotide residues shown in SEQ ID	AA186980, AA196549, AA513466
		AA564458, H92998, AA584288.
	114.	AA587915, AA746344, AA749431
	17.	AA836837, AA946608, AA977318
		A1000432, AI000474, AA150015,
		AA487107, AA777153, AA778651
		AA778720, AA824341, AI038357,
		A1038499, A1076148, A1077415,
		AI040155, AI090830, T16464,
		AA682387
841127	Preferably excluded from the present invention are	N56381
- ·- • • ·	one or more polynucleotides comprising a	
	1	
841128		
J.1120		
	mucleotide ceauence decombed by the general	
	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to	
841128	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 906 of SEQ ID NO:640, b is an integer of 15 to 920, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:640, and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a	

	1706. where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:641, and where b is greater than or equal to a + 14.	
841132	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2156 of SEQ ID NO:642, b is an integer of 15 to 2170, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:642, and where b is greater than or equal to a + 14.	
841133	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1698 of SEQ ID NO:643, b is an integer of 15 to 1712, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:643, and where b is greater than or equal to a + 14.	
841134	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1779 of SEQ ID NO:644, b is an integer of 15 to 1793, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:644, and where b is greater than or equal to a + 14.	T74160, R06227, R06228, R20261, N39674, AA010503, AA010502, AA258312, AA258463, AA261908, AA737428, AA775864, F12625
841135	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2665 of SEQ ID NO:645, b is an integer of 15 to 2679, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:645, and where b is greater than or equal to a + 14.	T87474, T81011, T98855, T99451, R12662, R20561, R35774, R20561, H21581, H30226, H30799, H38312, R87419, R87929, H60442, H60488, H82962, H83193, N66578, N98838, W02116, W32577, W74585, W94377, AA228054, AA228143, AA242795, AA252182, AA482136, AA491273, AA503197, AA603089, AA740514, AA847687, AA872051, AA904292, AA908878, AA937801, AA937818, AA937819, AA989229, AI081549, W27606, W28260, C01173, AA090299, AA292408, AA394244, AA430326, AA443626, AA678857, AA779761, AA838766, AA860401, AA890101, AA772701, AA905819, AA913578, AA913854, AA916557, AI073446, AI040348, AI086394, F04810, F08603
841136	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to	T75313, R38678, H08805, H08881, H29671, W45345, AA460481. AA461049, AA514387, AA928902, C06109, C15637, A1033621, F13191, F10796

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	of nucleotide residues shown in SEQ ID NO:646.	
841138	Preferably excluded from the present invention are one or more polynucleotides comprising a	T74162. R08056. R37869. R51362, H95451, N47377, N50420. N51509,
	nucleotide sequence described by the general	N56992, N63081, W02768,
	formula of a-b. where a is any integer between 1 to	W74061, W78768, W81120,
	1311 of SEQ ID NO:647, b is an integer of 15 to 1325, where both a and b correspond to the	AA004354. AA004355. AA010410, AA011238. AA194618. AA461179,
	positions of nucleotide residues shown in SEQ ID	AA492472. AA602060, AA742194,
	NO:647, and where b is greater than or equal to a +	AA886331. AA904165. AA947316.
	14.	AA969817, C02127, AA642584, AA393447, AA398743, AA449962,
		AA706890, AA757113, AA777532,
		AA812606, AA971808, AA947589,
		AI033060, AI077473, F12626, F10242
841139	Preferably excluded from the present invention are	110242
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to	
	592 of SEQ ID NO:648. b is an integer of 15 to	
	606, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:648, and where b is greater than or equal to a + 14.	
841141	Preferably excluded from the present invention are	T70178, T78370, H06915, H19407,
	one or more polynucleotides comprising a	H20353, H59580, H68320,
	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to	AA282429, AA504514, AA504598, AA564110, AA622709, AA635277,
	1682 of SEQ ID NO:649, b is an integer of 15 to	AA814782, AA094950, AA890363,
	1696, where both a and b correspond to the	AI082674, T69852
	positions of nucleotide residues shown in SEQ ID NO:649, and where b is greater than or equal to a +	
	14.	
841142	Preferably excluded from the present invention are	R16159, R55052, R59723, R59832,
	one or more polynucleotides comprising a nucleotide sequence described by the general	R72647, R72726, H60244, N33957, N49667, N73245, N79519, N79654,
	formula of a-b, where a is any integer between 1 to	W16510, W16960. AA032239,
	3045 of SEQ ID NO:650, b is an integer of 15 to	AA033647, AA463305, AA280166,
	3059, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID	AA729292, AA954720, AA988492, AI015581, C02527, AA393868,
	r ·	AA478565, AA478698, AA773346,
	14.	A1032816, A1078056, Z38500,
841145	Preferably excluded from the present invention are	Z42263, R15417, AA701338 T50010, R23613, R26166, R31656,
	one or more polynucleotides comprising a	R32370, H43626, H44680, R97791,
	· _ · _ · _ · _ · _ · _ · _ · _ · _	R97841, H96639, N36375,
		AA192798, AA236435, AA262943, AA491551, AA491856, AA506260,
	1366, where both a and b correspond to the	AA533612, AA563684, AA639509,
		AA193170, AA453170, AA478555,
	NO:651, and where b is greater than or equal to a + 14.	AA478689, AA628811, AA971928
841146	• • • • • • • • • • • • • • • • • • • •	T49969, T55739, T55781, R44196,
	one or more polynucleotides comprising a	R44196, R56223, R65770, R65861,
	, , ,	
		AA044179. AA044364. AA056411.
	11411 of SEQ ID NO.032, b is an integer of 13 to	MAU44179, MAU44364, MAUS6411, J

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	1425, where both a and b correspond to the	AA056659. AA088892. AA129553.
	positions of nucleotide residues shown in SEQ ID	AA136567. AA182691. AA460927.
	NO:652, and where b is greater than or equal to a +	AA461231. AA423834. AA423872.
	14.	AA429008, AA284199, AA502390.
		AA503746, AA524414, AA573485,
		AA731750, AA748643, N42149,
		C03886. C04870. AA401440.
		AA443282, AA453535, AA680012.
		AA885303, AA773518, AA905979,
		AA917504. AA993697. Al014527.
		A1038343, A1039552, A1075983,
		A1040477, T15474, Z40499
841150	Desforably avaluded for all	A1040477, 113474, 240499
041130	Preferably excluded from the present invention are	
i	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
İ	600 of SEQ ID NO:653, b is an integer of 15 to	
	614, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:653,	
	and where b is greater than or equal to a + 14.	
841153	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2798 of SEQ ID NO:654, b is an integer of 15 to	
	2812, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:654, and where b is greater than or equal to a +	
	14.	
841154	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
Ì	formula of a-b, where a is any integer between 1 to	
	1983 of SEQ ID NO:655, b is an integer of 15 to	
ĺ	1997, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:655, and where b is greater than or equal to a +	
841156	14.	
841130	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1583 of SEQ ID NO:656, b is an integer of 15 to	
	1597, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:656, and where b is greater than or equal to a +	
	14.	
841157	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	358 of SEQ ID NO:657, b is an integer of 15 to	
	372, where both a and b correspond to the positions	ļ
	of nucleotide residues shown in SEQ ID NO:657,	
	and where b is greater than or equal to a + 14.	
841159		T68013, T68157, R10329, R21935.
		R22192, R22205, R22243, R22259,
	Eure of more borkmencorines combitisms a	1441,74, 144603, 142443, 142439,

	nucleotide sequence described by the general	R22584, R36709, R37550, R37969.
	formula of a-b. where a is any integer between 1 to	R56215. H12513. H16028. H42778.
	1212 of SEQ ID NO:658, b is an integer of 15 to	H42777, H43237, H49572, H54638.
	1226, where both a and b correspond to the	H62014, H62015, H87009, H96461.
	positions of nucleotide residues shown in SEQ ID	H99230, N20416, N21538, N26351,
	NO:658, and where b is greater than or equal to a +	N26416, N31763, N32343, N57436,
	14.	N68981, N76396, N94358.
		W47130, W47170, W47092.
		W47303, W56010, W56319.
		W57999, W58082, W72901.
		W80918, W80919, W96026.
		W96247, AA009932, AA027098.
		AA035781, AA055834, AA056358,
		AA135747, AA135791. AA243433,
		AA513298, AA526888, AA553702,
		AA564515, AA569564. AA578962.
		AA659038, AA664637, AA664725,
		AA687093, AA863102. AA865570,
		AA937259, AA948115, F18278.
		F19594, N56026, AA642679.
		AA205043, AA284794, AA284555,
		AA402214, AA402779, AA421675,
		AA421674, AA442253. AA477073,
		AA670491, F22786. AA703506.
		AA732970, AA854540, AA993128,
		A1023954, A1039979, A1041931.
		A1094341, T24697, R10328
841164	Preferably excluded from the present invention are	110) 13 11, 12 10) 1, 1110320
041104	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	450 of SEQ ID NO:659, b is an integer of 15 to	
	464, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:659,	
	and where b is greater than or equal to $a + 14$.	
841167	Preferably excluded from the present invention are	
041107	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2535 of SEQ ID NO:660, b is an integer of 15 to	
	2549, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:660, and where b is greater than or equal to a +	
	114.	
841170		R01156, R05766, R36365, H10217,
	one or more polynucleotides comprising a	H10272, R85306, R85305, R92966,
	nucleotide sequence described by the general	R94593, R94594, H87399, N30640,
	formula of a-b, where a is any integer between 1 to	N62299, N67420, N75554, N95145,
	1148 of SEQ ID NO:661, b is an integer of 15 to	W69646, W69647, W87822,
	1162, where both a and b correspond to the	W87911, AA025260, AA025338.
	positions of nucleotide residues shown in SEQ ID	AA054320, AA054420, AA070779,
	r	AA132029, AA132151, AA147254.
	14.	AA156241, AA173636, AA458647,
	1.	AA458883, AA459073. AA282256,
		AA490721, AA491213, AA581846,
		AA581975, AA592924. AA617652.
		AA715103, AA827927. AA878469.
		p

		AA922921, AA931906, AI024987, AI031704, R29605, AA641542.
		AA210625, AA447827, AA679290.
		AA845918, AA992688, AI005398.
		A1093117
841173	Preferably excluded from the present invention are	T55223. T80732. R48806. R48918.
	one or more polynucleotides comprising a	H04949, H04950, H39561,
ļ	nucleotide sequence described by the general	AA039409, AA100837, AA128896.
ĺ	formula of a-b. where a is any integer between 1 to	AA143629, AA191274, AA191696.
Ì	1164 of SEQ ID NO:662, b is an integer of 15 to	AA223135, AA223325, AA421101.
	1178, where both a and b correspond to the	AA426158, AA910569, AA399132,
	positions of nucleotide residues shown in SEQ ID	AA399614, AA481845, F01004
	NO:662, and where b is greater than or equal to a +	
	14.	
841176	Preferably excluded from the present invention are	T57362, T57445, N98867, W04663,
	one or more polynucleotides comprising a	W58769, AA148433, AA156103,
	nucleotide sequence described by the general	AA157650, AA157759, AA192185.
		AA194358, AA491525, AA492088.
	1 3 3 3 3	AA515848, AA526390, AA639064,
		AA575866, AA579682, AA728989,
	of nucleotide residues shown in SEQ ID NO:663,	AA737291, AA740468, AA741404,
	and where b is greater than or equal to a + 14.	AA827641, AA862841, AA932208,
		AA974467, AA995725, F19218,
		F19304, N55638. N56464, N89217.
		AA247353, AA401334, F20491,
		F20992, F21312, AA608827,
		F22463, F22587, AA705812, AA889507
841178	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1656 of SEQ ID NO:664, b is an integer of 15 to	
	1670, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:664, and where b is greater than or equal to a +	
	14.	
841180	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to 3350 of SEQ ID NO:665, b is an integer of 15 to	
	3364, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:665, and where b is greater than or equal to a +	
	14.	
841181	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1209 of SEQ ID NO:666, b is an integer of 15 to	
-	1223, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:666, and where b is greater than or equal to a +	
941100	14.	
841182	Preferably excluded from the present invention are	
L	one or more polynucleotides comprising a	

	nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1983 of SEQ ID NO:667. b is an integer of 15 to 1997, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:667, and where b is greater than or equal to a + 14.	
841185	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 572 of SEQ ID NO:668, b is an integer of 15 to 586, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:668, and where b is greater than or equal to a + 14.	R52220. R70423. N35269. N40823, W42954. AA281810. AA524713, AA093155
841187	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1083 of SEQ ID NO:669, b is an integer of 15 to 1097, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:669, and where b is greater than or equal to a + 14.	R13459. R37369. AA814459. AA977199. AA989190, A1004908, F19612. C15655. AA203403, AA486444. AA489297. AA677279, AA775589. AA909931, A1032801, A1034230, A1040649, A1091697
841188	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2886 of SEQ ID NO:670, b is an integer of 15 to 2900, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:670, and where b is greater than or equal to a + 14.	
841189	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 973 of SEQ ID NO:671, b is an integer of 15 to 987, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:671, and where b is greater than or equal to a + 14.	AA001736, AA132627, AA568390, F19019, W26201, W69639, W69638
841192	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2811 of SEQ ID NO:672, b is an integer of 15 to 2825, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:672, and where b is greater than or equal to a + 14.	T71550, T83900, R08468, T83730, T96865, T96866, R25503, R33010, R33895, R35402, R49701, R49701, H26757, H26856, H26871, H64273, H64272, H79029, N38824, N45452, N59621, N78174, W32994, AA022663, AA022744, AA033910, AA034030, AA210790, AA215315, AA228688, AA489044, AA552631, AA761038, AA761245, AA765845, AA805289, AA862618, AA918378, AA991204, C20951, AA476743, AA476746, AA663218, AA663792, AA706854, AI022429, AI028102, AI038738, AI051573, AI051788, AI082582, AI084275, D25731,

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		F04009, F06746, F07761.
		AA701500, AA702733
841194	Preferably excluded from the present invention are one or more polynucleotides comprising a	T74233, T88950, T89868, R11972, T84649, R18375, R27737, R27738, R27737, R27738, R27737, R27738, R27737, R27738, R27737, R27738, R27737, R27738, R27737, R27738, R27737, R27738, R27737, R27738, R27737, R27738, R27737, R27738, R27737, R27738, R27737, R27738, R27737, R27738, R27737, R27738, R27788, R27788, R2788, R2788, R2788, R2788, R27888, R27888, R27888, R27888, R27888, R27888, R27888, R27888, R2
	nucleotide sequence described by the general	R37065. R42578. R42578. R61382.
	formula of a-b. where a is any integer between 1 to	R61424, R69423, R69553, R77025, H00275, H00276, H08524, H08525,
	1416 of SEQ ID NO:673, b is an integer of 15 to 1430, where both a and b correspond to the	R97851, H81046, H81141.
	positions of nucleotide residues shown in SEQ ID	AA429044, AA429638, AA504809,
	NO:673, and where b is greater than or equal to a +	AA505159, AA552544, AA582297,
	114.	AA613016, AA627349. AA639590,
		AA573385, AA576599, AA657983,
		AA804493, AA866130, AA866200,
		AA908911, AA908916, AA922964.
		A1088797, AA648981, AA649000,
		AA442874. AA456809. AA479714,
		AA479836, AA485736, AA486457,
		AA448038, AA431346, AA434235,
		AA434321. AA683236. AA779612.
		AA885013. AA948075. A1004354,
		A1039367, A1090972, AA953777, T19678, F12570, F10186
841195	Preferably excluded from the present invention are	119078,112370,110180
041175	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	1111 of SEQ ID NO:674, b is an integer of 15 to	
	1125, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:674, and where b is greater than or equal to a +	
841198	Default variety and from the apparet invention are	
041190	Preferably excluded from the present invention are one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1063 of SEQ ID NO:675, b is an integer of 15 to	
	1077, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:675, and where b is greater than or equal to a +	
041000	14.	Deeder Deedes Hooses House
841200		R55754, R55738, H22912, H24090,
	one or more polynucleotides comprising a	H29740, AA232258, AA442918,
	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to	Z42805, F13301
	906 of SEQ ID NO:676, b is an integer of 15 to	
	920, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:676,	
	and where b is greater than or equal to $a + 14$.	
841201	Preferably excluded from the present invention are	AA932596. D80656, D81201,
	one or more polynucleotides comprising a	D81580, C15574, AI025303,
	nucleotide sequence described by the general	AA701535
	formula of a-b, where a is any integer between 1 to	
	1233 of SEQ ID NO:677, b is an integer of 15 to	
	1247, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	1
	NO:677, and where b is greater than or equal to a +	
	14.	

841202	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	2653 of SEQ ID NO:678, b is an integer of 15 to	
	2667, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:678, and where b is greater than or equal to a +	
	14.	
841209		
841209	Preferably excluded from the present invention are	
1	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	938 of SEQ ID NO:679, b is an integer of 15 to	
	952, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:679,	
	and where b is greater than or equal to a + 14.	
841210	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2295 of SEQ ID NO:680, b is an integer of 15 to	
	2309, where both a and b correspond to the	
]	positions of nucleotide residues shown in SEQ ID	
i		
l	NO:680, and where b is greater than or equal to a +	
041010	14.	
841213		AA133947
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
İ	formula of a-b, where a is any integer between 1 to	
	437 of SEQ ID NO:681, b is an integer of 15 to	
	451, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:681,	
	and where b is greater than or equal to a + 14.	
841217	Preferably excluded from the present invention are	C17425
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1284 of SEQ ID NO:682, b is an integer of 15 to	
	1298, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:682, and where b is greater than or equal to a +	
	14.	
841219	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	845 of SEQ ID NO:683, b is an integer of 15 to	
	859, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:683,	1
941000	and where b is greater than or equal to a + 14.	
841222	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1237 of SEQ ID NO:684, b is an integer of 15 to	
	1251, where both a and b correspond to the	

	positions of nucleotide residues shown in SEQ ID	
	NO:684. and where b is greater than or equal to a +	
	14.	
841223	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 2586 of SEQ ID NO:685. b is an integer of 15 to 2600, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:685, and where b is greater than or equal to a + 14.	T48001, T48881, T48882, T73986. T81100, T81151, T82458, R14770. R31779, R42540, R42540, R59226. R59286, R74588, R78473, R78539, H11611, H11700, H24632, H30034, H42336, R99669, N27968, N40733, N93719, W21125, W73346, W94235, W94237, AA026530, AA039301, AA039302, AA039611, AA234259, AA460377, AA460815, AA428913, AA429928, AA468129, AA468177, AA490801, AA602786, AA622704, AA911637, AA972558, AA973705, AA987526, A1005182, A1032242, W21787, W27428, AA654230, AA443814, AA447184, AA453411, AA453917, AA479442, AA489468, AA885138, AA904627, AA972149, A1014507, A1079892, Z39201, Z43111, D45594, D45647,
		E13465, F10053, AA700349
841224	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to	
	4627 of SEQ ID NO:686, b is an integer of 15 to 4641, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:686, and where b is greater than or equal to a + 14.	
841226	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 386 of SEQ ID NO:687, b is an integer of 15 to 400, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:687, and where b is greater than or equal to a + 14.	
841227	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2737 of SEQ ID NO:688, b is an integer of 15 to 2751, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:688, and where b is greater than or equal to a + 14.	
841228	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 955 of SEQ ID NO:689, b is an integer of 15 to 969, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:689.	

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	and where b is greater than or equal to a + 14.	
841231	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	965 of SEQ ID NO:690, b is an integer of 15 to	
	979, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:690,	
	and where b is greater than or equal to a + 14.	
841232	Preferably excluded from the present invention are	AA187539, AA593955, AA865468,
	one or more polynucleotides comprising a	AA247589, AA292221, AA394258,
	nucleotide sequence described by the general	A1090863, D20810
	formula of a-b, where a is any integer between 1 to	
	679 of SEQ ID NO:691, b is an integer of 15 to	
	693, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:691,	
941222	and where b is greater than or equal to a + 14.	T04054 T07027 T01204 D11017
841233	1 .	T86954, T87037, T91296, R11017,
	one or more polynucleotides comprising a	T78621, T79104, T84877, R00236,
	nucleotide sequence described by the general	R00549, R06637, R27822, R27923,
	, , ,	R35744, R45232, R45232, H21370,
	1368 of SEQ ID NO:692, b is an integer of 15 to	H21411, H51867, H60283, H60590,
	•	H67220. H99964, N28349, N30781,
	positions of nucleotide residues shown in SEQ ID	N41554, W47213, W47113,
	NO:692, and where b is greater than or equal to a +	W67148, W67391, AA004695,
	14.	AA004747, AA053562, AA053590,
		AA281060, AA287033, AA490978,
		AA586578, AA720644, AA766114,
		AA838572, AA907289, AA922314,
		AA923031, AA977015, AA975857,
		AI085503, AI085638, AA642438,
		AA399464, AA448558, AA449705,
		AA723708, AA781911, AA846349,
		AA861478, AA907377, AA907376,
		AA909728, AA913796, AA994740,
		AI017543, AI027687, AI042241,
		AI051442, Z41060
041024	D-C	A1031442, 241000
841234	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	3084 of SEQ ID NO:693, b is an integer of 15 to	
	3098, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:693, and where b is greater than or equal to a +	
	14.	
841236	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	475 of SEQ ID NO:694, b is an integer of 15 to	
	489 where both a and b correspond to the positions	
	489, where both a and b correspond to the positions of nucleotide residues shown in SEO ID NO:694	
	of nucleotide residues shown in SEQ ID NO:694.	
941229	of nucleotide residues shown in SEQ ID NO:694, and where b is greater than or equal to a + 14.	T40224 T41188 T74064 B10050
841238	of nucleotide residues shown in SEQ ID NO:694, and where b is greater than or equal to a + 14. Preferably excluded from the present invention are	T40324, T41188, T74964, R10059,
841238	of nucleotide residues shown in SEQ ID NO:694, and where b is greater than or equal to a + 14.	T40324, T41188, T74964, R10059, T80454, T85689, R12791, R19812, R24766, R24982, R33136, R33288,

		
) S	R39060, R43570, R45243, R45498.
İ	1830 of SEQ ID NO:695, b is an integer of 15 to	R52595, R54047, R54048, R43570,
İ	1844, where both a and b correspond to the	R45243, R45498, H19030, H19321,
	positions of nucleotide residues shown in SEQ ID	H24420. H42322. H51876. H72225.
	NO:695, and where b is greater than or equal to a +	H83771, H83913, H99717, N26245,
	14.	N30134, N41682, N55555, N75922,
		N76940. N80564, W04682.
		W07687, W31765, W59945.
•		W59946, W63652, W72530,
		W72085, W76498, W77868,
1		AA081593, AA082766, AA084671,
		AA085794, AA088881. AA102302,
		AA127864, AA188946, AA188844,
		AA191212, AA196628. AA196960,
		AA631298, AA639450, AA904092,
		AA932353, AA961333, AA987825.
		AA988659, AA996270. AA205904,
		AA209353, AA3930270, AA203904, AA209353, AA393979, AA435659,
		· · · · · · · · · · · · · · · · · · ·
		AA453452. AA600183. AA663064, AA670333, AA774102. AA843676,
		i 1
		AA854275, T03100, T03322.
		A1031917, A1066639, A1077924,
		A1078160, A1085089, T15361, T23623, T24082, Z42130, Z44535,
		F01670, F03604, F04096, F07839,
041720		F12754, F10361, AA700109
841239		R99939, H63661
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	591 of SEQ ID NO:696, b is an integer of 15 to	į
	605, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:696,	
841242	and where b is greater than or equal to a + 14. Preferably excluded from the present invention are	
041242	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	526 of SEQ ID NO:697, b is an integer of 15 to	
	540, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:697,	<u> </u>
	and where b is greater than or equal to $a + 14$.	
841243	Preferably excluded from the present invention are	
0-12-13	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	482 of SEQ ID NO:698, b is an integer of 15 to	
	496, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:698,	
	and where b is greater than or equal to $a + 14$.	
841248	Preferably excluded from the present invention are	
071440	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	973 of SEQ ID NO:699, b is an integer of 15 to	
	987, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:699.	

	and where his greater than ar aqual to a ± 14	<u> </u>
841250	and where b is greater than or equal to a + 14. Preferably excluded from the present invention are	
841230		
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1661 of SEQ ID NO:700, b is an integer of 15 to	
	1675, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:700, and where b is greater than or equal to a +	
	14.	
841251	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	542 of SEQ ID NO:701, b is an integer of 15 to	
	556, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:701,	
	and where b is greater than or equal to a + 14.	
841254		AA765476, AA807570, AI056471.
0-143-		A1075269, T24438
		(n.1073203, 12 44 30
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	1124 of SEQ ID NO:702, b is an integer of 15 to	
	1138, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:702, and where b is greater than or equal to a +	
	14.	
841263	•	H58432, AA996201, AA598598,
	[AA676797
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1048 of SEQ ID NO:703, b is an integer of 15 to	
	1062, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:703, and where b is greater than or equal to a +	
	14.	
841266	Preferably excluded from the present invention are	AA194189, Z36730
	one or more polynucleotides comprising a	ŕ
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	851 of SEQ ID NO:704, b is an integer of 15 to	
	865, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:704,	
	and where b is greater than or equal to $a + 14$.	
841269	Preferably excluded from the present invention are	
071207	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1369 of SEQ ID NO:705, b is an integer of 15 to	
	1383, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:705, and where b is greater than or equal to a +	
	NO:705, and where b is greater than or equal to a + 14.	
841272	NO:705, and where b is greater than or equal to a +	
841272	NO:705, and where b is greater than or equal to a + 14.	
841272	NO:705, and where b is greater than or equal to a + 14. Preferably excluded from the present invention are	

	1141 of SEQ ID NO:706, b is an integer of 15 to	
	1155, where both a and b correspond to the	
i	positions of nucleotide residues shown in SEQ ID	
	NO:706, and where b is greater than or equal to a +	
	14.	
841273	Preferably excluded from the present invention are	H03779, H16233, AA026349,
	one or more polynucleotides comprising a	AA192805, AA662333, F19078,
	nucleotide sequence described by the general	AA192917, AA921922, AI014904.
•	formula of a-b, where a is any integer between 1 to	Z30103
	1403 of SEQ ID NO:707. b is an integer of 15 to	
	1417, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:707, and where b is greater than or equal to a +	
	14.	
841276	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	·
	formula of a-b. where a is any integer between 1 to	
ł	934 of SEQ ID NO:708. b is an integer of 15 to	
	948, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:708,	
	and where b is greater than or equal to a + 14.	
841277	Preferably excluded from the present invention are	
-	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1315 of SEQ ID NO:709, b is an integer of 15 to	
	1329, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
Ì	NO:709, and where b is greater than or equal to a +	
	14.	
841278	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	520 of SEQ ID NO:710, b is an integer of 15 to	
	534, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:710,	
	and where b is greater than or equal to a + 14.	
841279		R09746, R10170, R65983, R65982,
	F	AA159394
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1129 of SEQ ID NO:711, b is an integer of 15 to	
	1143, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:711, and where b is greater than or equal to a +	
041200	14.	D00747 D10072 D22200 D22200
841280		R09747, R10073, R33389, R33390,
ŀ	1	R53830, R53881, R62135, R62236,
		R68366, R68572, H00283, H00284,
		H02853, H03749, AA157541,
		AA158194, AA159297, AA548738,
		D82787, C02009, AA443368,
		AA446944, AA431753, AA770228, AA947580, AA947962, A1091589,
		T48513
L	14.	140213

841282	one or more polynucleotides comprising a nucleotide sequence described by the general	T74298, R51507, R78167, H08569, N39881, N57231, AA460120, N56328, N83397, N86852, N87082, C04661, AA090325, AA095234, AA095835, AA216220, AA904685,
	1036, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:713, and where b is greater than or equal to a + 14.	AA905691, Z26999, F12501
841283	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 4429 of SEQ ID NO:714, b is an integer of 15 to 4443, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:714, and where b is greater than or equal to a + 14.	T58069, T58183, R14589, R23688, R24089, R27635, R30799, R31679, R31721, R41362, R44141, R41362, R44141, R72635, R72711, H02881, H17299, H17300, H44461, N33623, N49466, W15423, W39662, W52186, W58286, W58287, AA034289, AA035171, AA040731, AA041202, AA043194, AA043349, AA043596, AA047418, AA047419, AA058764, AA101975, AA112998, AA114961, AA114960, AA127933, AA126680, AA156822, AA193516, AA195626, AA256538, AA256426, AA468894, AA507356, AA507368, AA516516, AA534147, AA555266, AA594917, AA631771, AA568460, AA715240, AA838519, C04979, AA707718, AA709391, AA725438, AA928191, A1024960, A1050938, A1074716, A1078311, A1087155, A1088407, A1088592, A1089297, Z38688, Z42494, AA683480, AA693964
841286	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2085 of SEQ ID NO:715, b is an integer of 15 to 2099, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:715, and where b is greater than or equal to a + 14.	T69086, H09300. H21912, H27306, H27307, H44750, H44751, AA028928, AA031481, AA031460, AA036634, AA040943, AA043170, AA042941, AA047185, AA057349, AA128136, AA224030, AA287364, AA287502, AA493521, AA506405, AA532934, AA635612, AA635790, AA017240, AA028927, AA043023, AA084506, AA126989, AA653687, AI040204, AI095872
841287	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 560 of SEQ ID NO:716, b is an integer of 15 to 574, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:716, and where b is greater than or equal to a + 14.	
841288	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 833 of SEQ ID NO:717, b is an integer of 15 to	

		γ
	847, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:717.	
	and where b is greater than or equal to a + 14.	
841291	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2072 of SEQ ID NO:718, b is an integer of 15 to	
	2086, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
1	NO:718, and where b is greater than or equal to a +	
041202	14.	
841292	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to 2404 of SEQ ID NO:719, b is an integer of 15 to	
:	2418, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:719, and where b is greater than or equal to a +	
	14.	
841294	Preferably excluded from the present invention are	
011231	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
l	formula of a-b, where a is any integer between 1 to	
	2527 of SEQ ID NO:720, b is an integer of 15 to	
	2541, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:720, and where b is greater than or equal to a +	
	14.	
841296	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
†	nucleotide sequence described by the general	
-	formula of a-b, where a is any integer between 1 to	
	2157 of SEQ ID NO:721, b is an integer of 15 to	
· .	2171, where both a and b correspond to the	
İ	positions of nucleotide residues shown in SEQ ID	
	NO:721, and where b is greater than or equal to a +	
	14	
841298	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1874 of SEQ ID NO:722, b is an integer of 15 to 1888, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:722, and where b is greater than or equal to a +	
	114.	
841301		T64693, R51679, R56608, H47224,
		N50001, N79401, W19677,
		AA143155, H59350, H69073,
		AA580509, AA487750, AA626464,
	1	T10911, T11398, T18502, T18605,
	980, where both a and b correspond to the positions	
		F01055, F01138
1		
L	and where b is greater than or equal to a + 14.	

	nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1798 of SEQ ID NO:724, b is an integer of 15 to 1812, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:724, and where b is greater than or equal to a + 14.	R38770. R43007, R43007, H15446. H15504, H22797. H23005. H24923. N94968. W30841, W39757, W40248. W84533, AA033611. AA127942. AA127976. AA132110. AA148952. AA148953. AA513119. AA524721. AA551707, AA564773. AA662707. AA814997. AA910847. AA927433. AA886610, W05640. W19569. W22703, W39296, C04698. AA096287. C75085. AA704257. A1032787, A1075657, A1086246. F04646. F08424, F00247
841304	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 960 of SEQ ID NO:725, b is an integer of 15 to 974, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:725, and where b is greater than or equal to a + 14.	
841305	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1494 of SEQ ID NO:726, b is an integer of 15 to 1508, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:726, and where b is greater than or equal to a + 14.	
841309	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1990 of SEQ ID NO:727, b is an integer of 15 to 2004, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID	R62724, H42483, H71117, H71118, N92184, N94614, W39691, W45047, W49839, AA046636, AA046775, AA047446, AA047503, AA160181, AA488796, AA741383, AA746409, AA811149, AA833797, AA946892, AA999767, AA249075, AA248881, AA451825, AA454157, AA628416, AA846238, A1004357
841314	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1456 of SEQ ID NO:728, b is an integer of 15 to 1470, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:728, and where b is greater than or equal to a + 14.	
841316	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1741 of SEQ ID NO:729, b is an integer of 15 to 1755, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:729, and where b is greater than or equal to a +	

	14.	
841318	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	423 of SEQ ID NO:730. b is an integer of 15 to	
	437, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:730.	
· · · · · · · · · · · · · · · · · · ·	and where b is greater than or equal to a + 14.	
841321	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b. where a is any integer between 1 to	
	3649 of SEQ ID NO:731, b is an integer of 15 to	
	3663, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:731, and where b is greater than or equal to a +	
241224	14.	
841324	Preferably excluded from the present invention are	T96831. AA258405. AA258750,
	one or more polynucleotides comprising a	H61868. AA828983. AA447894.
	nucleotide sequence described by the general	T96832
	formula of a-b, where a is any integer between 1 to	
	2003 of SEQ ID NO:732, b is an integer of 15 to	
	2017. where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:732, and where b is greater than or equal to a +	
841326	14.	T67160 T67170 D12400 D25161
641320		T67169, T67170, R13400, R25161,
		R40914, R81373, H03937, N32627,
		N46428, N47847, N99904,
	formula of a-b, where a is any integer between 1 to 1990 of SEQ ID NO:733, b is an integer of 15 to	W25263, W56840, W60329,
		W86618, W86691, AA062970, AA082457, AA100373, AA101448,
		AA126274, AA134708, AA150508,
	F -	AA156712, AA157068, AA156974,
	114.	AA165009, AA171491, AA171862.
	17.	AA179767, AA180187, AA180497,
		AA179780, AA180441, AA187010,
		AA190353, AA195448, AA227391,
		AA258327, AA258536, AA262632,
		AA489087, AA489151, AA503664,
		AA523741, AA582440, AA588337,
		AA621830, AA621902, AA640554,
		AA568289, AA744568, AA761881.
		AA827997, AA847455, AA913189,
		AA913652, AA974509, U46229,
	1	N84275, N85488, N87880,
	I	AA641297, C21410, AA091107,
	1	AA095442, AA209417, AA219739,
		AA599903, AA676460, AA677610,
		AA678785, AA707112, AA725266,
		AA757097, AA779171, AA779610,
		AA852239, AA773175, AA993290.
		AI023440, AI026810, AI039755,
		AI082013. AI089353, AA773895
841328	Preferably excluded from the present invention are	R93165, R93258, AA115956,
		AA251714. AA206198. AA676321
	and a more pary manifesticular comprising a	

		<u>,</u>
	nucleotide sequence described by the general	
1	formula of a-b. where a is any integer between 1 to	
	1114 of SEQ ID NO:734, b is an integer of 15 to	
	1128, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:734, and where b is greater than or equal to a +	
	14.	
841329	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	758 of SEQ ID NO:735, b is an integer of 15 to	
	772, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:735,	
	and where b is greater than or equal to a + 14.	
841330	Preferably excluded from the present invention are	R22883, R66728, R78688, H95005,
041550	one or more polynucleotides comprising a	H95113, N27178, N39923,
	nucleotide sequence described by the general	AA037201, AA991171, U69556,
	formula of a-b. where a is any integer between 1 to	AA913589, AI085980
	1085 of SEQ ID NO:736, b is an integer of 15 to	MAJ1009, MIU00390U
	1099, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:736, and where b is greater than or equal to a +	
941222	14.	T50010 T50002 P12022 P20524
841333	Preferably excluded from the present invention are	T59818, T59682, R12623, R20524,
	one or more polynucleotides comprising a	R21444, R35122, R20524, R64024,
	nucleotide sequence described by the general	H89257, N93515, W21251,
	formula of a-b, where a is any integer between 1 to	W33070, W35419, W96447,
	3205 of SEQ ID NO:737, b is an integer of 15 to	W96544. AA039907. AA043958,
	3219, where both a and b correspond to the	AA043824, AA045684, AA045685,
	positions of nucleotide residues shown in SEQ ID	AA088865, AA099890, AA126585.
	NO:737, and where b is greater than or equal to a +	AA127996, AA128092, AA176159,
	14.	AA491962, AA595337, AA610623,
		AA668991, AA688420, AA765329,
		AA768238, AA831102, AA908487,
		D81709, N89092, C02635, C04695,
		AA416971, AA469921, AA598468,
		AA634649, AA939133, AA995031, i
		AI082151. AI123086. T19281
841334	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	835 of SEQ ID NO:738, b is an integer of 15 to	
	849, where both a and b correspond to the positions	
1	of nucleotide residues shown in SEQ 1D NO:738,	
	and where b is greater than or equal to a + 14.	
841335		R22949, R23055, R78445, W19388,
	· · · · · · · · · · · · · · · · · · ·	AA126774, AA133979, AA173276,
		AA210721, AA210826, AA287324.
		AA287338, AA504314. AA688155,
1		AA829651, AA836121, AA934545,
	2069, where both a and b correspond to the	A1004681, AA205833, AA628867,
1		A1028632, A1026835. A1075920
	NO:739, and where b is greater than or equal to a +	
	14.	
841336	Preferably excluded from the present invention are	
	property distributed in the property in the distributed and	

	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1553 of SEQ ID NO:740, b is an integer of 15 to	
	1567. where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:740. and where b is greater than or equal to a +	
	14.	
841337	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2815 of SEQ ID NO:741, b is an integer of 15 to	
	2829, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:741, and where b is greater than or equal to a +	
	14.	
841339	Preferably excluded from the present invention are	R05977, W07729, W85962
071337	one or more polynucleotides comprising a	4.03277. WOTTED. WO3702
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	912 of SEQ ID NO:742, b is an integer of 15 to	
	926, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:742,	
	and where b is greater than or equal to $a + 14$.	
841340	Preferably excluded from the present invention are	T87162, T87245, R83644, H65997,
	one or more polynucleotides comprising a	W86660, W87319, AA279035,
	nucleotide sequence described by the general	Z25793
	formula of a-b, where a is any integer between 1 to	
	1003 of SEQ ID NO:743, b is an integer of 15 to	
	1017, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:743, and where b is greater than or equal to a +	
	14.	
041241		
841341	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	347 of SEQ ID NO:744, b is an integer of 15 to	
	361, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:744,	
	and where b is greater than or equal to $a + 14$.	
841342	Preferably excluded from the present invention are	T61211, R31792, R31806, R31842,
·	one or more polynucleotides comprising a	R31858, AA463633, AA279178,
	nucleotide sequence described by the general	AA279190, AA419400. AA482006,
		AA521039, AA528684, D80048,
	1922 of SEQ ID NO:745, b is an integer of 15 to	AA649649, AA651768, AA652075,
	1936, where both a and b correspond to the	
		AA652129, AA293205, AA293206,
	positions of nucleotide residues shown in SEQ ID	AA443179, AA936343
	NO:745, and where b is greater than or equal to a +	
	14.	
841343	Preferably excluded from the present invention are	Г72227, Т92679, R30797, H88591,
	one or more polynucleotides comprising a	H97509. N22238, N28360.
	nucleotide sequence described by the general	AA045341, AA045429, AA054480,
		AA058517, AA085747, AA111873,
		AA112181, AA128375, AA146828,
	1619, where both a and b correspond to the	AA146642, AA169595, AA194346,
	indication and a series of the series of the	

	positions of nucleotide residues shown in SEQ ID	AA194443, AA425051, AA491535,
	NO:746, and where b is greater than or equal to a \pm	AA491727, AA553943. AA603289.
ı	14.	AA604115, AA618399, AA631253,
		AA632743, AA640345, AA565849,
		AA657551, AA657552, AA747335,
		AA88284, AA903805, AA903460,
		AA932251. AA932650. Al074492,
		· 1
		W26992, W27525, AA092612,
		AA093936. AA095079. AA495989.
		AA844221, AA845438, AA897210,
		AA928087, AA970794, Al083509,
		F04554, F00612
841347	Preferably excluded from the present invention are	R14800, R25047, R59757, W23811,
	one or more polynucleotides comprising a	Z42261
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	478 of SEQ ID NO:747, b is an integer of 15 to	
	492. where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:747.	
041252	and where b is greater than or equal to a + 14.	T20/21 T47/02 T17/02 T50214
841352	Preferably excluded from the present invention are	T39621, T47602, T47603, T50214.
	one or more polynucleotides comprising a	T50262, T56171, T59994, N69976,
	nucleotide sequence described by the general	N70656, N92997, N98578,
	formula of a-b, where a is any integer between 1 to	W19319, W21208, W25470,
	589 of SEQ ID NO:748, b is an integer of 15 to	W38523, W79772, W79108,
	603, where both a and b correspond to the positions	N90073, AA082281, AA083720,
	of nucleotide residues shown in SEQ ID NO:748,	AA102538, AA111985, AA130519,
	and where b is greater than or equal to a + 14.	AA130518, AA131208. AA155889,
	land the same of squares as a fine	AA156193, AA157132, AA157188,
	,	AA159333, AA159346, AA159404,
		1
		AA159443, AA166964, AA167042,
		AA425520. AA228398. AA228399,
		AA230245, AA420475, AA470507,
		AA470518, AA470554, AA470564,
		AA470784, AA480624, AA482721,
		AA483943, AA484448, AA492057,
		AA492060, AA501534, AA501688,
		AA501705, AA502485, AA503438,
		AA507807, AA522865, AA523150,
		AA523460, AA525078, AA531038,
		AA532886, AA534182, AA535479,
		AA541295, AA548431, AA559139,
		AA558899. AA559895. F16130.
		f,
		F17508, AA582864, AA582977,
		AA594817, AA600752, AA602218,
		AA603293, AA603440, AA614252,
		AA614593, AA627143, AA631240.
		AA639097, AA640665, AA569026,
		AA569795, AA573527, AA578708,
		AA578892, AA579475, AA580548,
		AA568421, AA654902, AA655027,
		AA657423, AA657485, AA657617.
•		AA657745, AA657873, AA658089.
		AA659338. AA661580. AA662328.
		AA662945, AA664742, AA714342,
		AA721063, AA729626, AA729804,
		AA730697, AA737143, AA746051,

		AA814722, AA826140, AA838575.
		AA856900, AA857814, AA876960.
		AA879008, AA879230, AA886873.
		AA887104. AA888489. AA908834.
		AA922670. AA907193. AA931585.
		AA939179, AA969542, AA978087.
İ		AA988995, A1000230, A1002473,
		A1056486, A1066507, D45301,
		A1089666, A1094699, N84532,
		N84765, N86425, N89209, C14372,
		C14508, C14515, C14530, C14555,
		C14605, C14770, C14788, C14791,
		AA640945, C14863, C14868,
		AA090649, C14935, C15107,
		C15223, C15471, C15682, C15775,
		C15870. C15930. C15935,
		AA131294, AA643297, AA643298,
		AA643790, AA650598, AA652545.
Ì		AA653802, AA653817, AA216075,
		AA216113. AA216340, AA249201.
		F20411. F20721. AA457776,
		AA478848, AA478850, AA479946,
		AA489323, AA609264, AA625634,
		AA669489, AA457581, F22821,
		AA845104, T25813, T26333,
		AA968927, AI080006, AI080259,
-		D19689, T50162, T59495, F13766,
041000		AA694377
841353	Preferably excluded from the present invention are	N70887, N80736, W06893,
	one or more polynucleotides comprising a	W07533, W86227, W86228,
	nucleotide sequence described by the general	AA101268, AA877981, D79871,
	formula of a-b, where a is any integer between 1 to	D81890, AA206735, AA205181,
	2031 of SEQ ID NO:749, b is an integer of 15 to	AA205255, AA205303, AA447456,
	2045, where both a and b correspond to the	AA454967. AA454966. AA778336,
	positions of nucleotide residues shown in SEQ ID	AA970143, T18602, D21013.
	NO:749, and where b is greater than or equal to a +	Z38951, Z45683, T27468, T27472,
	14.	F06030, F04572
841354	Preferably excluded from the present invention are	H08639, W86219, AA136665,
1	one or more polynucleotides comprising a	AA136781, AA256507, AA256508,
	nucleotide sequence described by the general	AA603334, AA830237, AA978040,
	formula of a-b, where a is any integer between 1 to	AA987352, AA733094, T10254,
	1130 of SEQ ID NO:750, b is an integer of 15 to	Z40940
	l 144, where both a and b correspond to the	
ĺ	positions of nucleotide residues shown in SEQ ID	
	NO:750, and where b is greater than or equal to a +	
	14.	
841360	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
ŀ	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1584 of SEQ ID NO:751, b is an integer of 15 to	
	1598, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ 1D	
	NO:751, and where b is greater than or equal to a +	j i
	14.	
841366	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
		1

	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1471 of SEQ ID NO:752, b is an integer of 15 to	
	1485, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:752, and where b is greater than or equal to a +	
	14.	
841405	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1742 of SEQ ID NO:753. b is an integer of 15 to	
	1756, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:753, and where b is greater than or equal to a +	
041526	14.	
841526	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1781 of SEQ ID NO:754, b is an integer of 15 to	
	1795, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:754, and where b is greater than or equal to a +	
	14.	
841712	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	i
	formula of a-b, where a is any integer between I to	
•	1266 of SEQ ID NO:755, b is an integer of 15 to	
	1280, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:755, and where b is greater than or equal to a +	
	14.	
841860	Preferably excluded from the present invention are	
011000	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	3651 of SEQ ID NO:756, b is an integer of 15 to	
	3665, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:756, and where b is greater than or equal to a +	
0.150.15	14.	
842042		R27775, R80938, R81040, H25849,
		H30556, H39898. H43685. H84621,
		H85342, H85863. H97623, N20020,
	formula of a-b, where a is any integer between 1 to	N24066, N27150, N34137, N74869,
	1207 of SEQ ID NO:757, b is an integer of 15 to	AA013261, AA018222, AA056554,
	1221, where both a and b correspond to the	AA075594, AA111995, AA176737,
		AA196064, AA514335, AA731163.
	•	AA732094, AA769189, AA877155,
		AA887521, AA887647, AA915962,
		A1017806, C03891. AA648526.
		AA411503, AA890618, T03509,
		T11362, F00065
842453	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	pare or more portamente orides comprising a	

842635	hucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 617 of SEQ ID NO:758, b is an integer of 15 to 631, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:758, and where b is greater than or equal to a = 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2482 of SEQ ID NO:759, b is an integer of 15 to 2496, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:759, and where b is greater than or equal to a +	
842927	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2034 of SEQ ID NO:760, b is an integer of 15 to 2048, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:760, and where b is greater than or equal to a + 14.	R09931, T99454, R02759, R86215, H59062, AA193428, AA193451, AA235140, Z45646
842988	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1743 of SEQ ID NO:761, b is an integer of 15 to 1757, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:761, and where b is greater than or equal to a + 14.	R18558, R33656, R33770, R41425, R41425, R62291, R62292, H00771, H03451, H03535, H11769, H12026, H16764, H16873, H25402, H25403, H25761, H25802, H26331, N27708, N33053, N35107, N36527, N48776, N62848, N77755, W48862, W48734, AA016281, AA040052, AA045034, AA151597, AA149477, AA150284, AA150386, AA421931, AA458926, AA805628, AA831459, AA862368, AA946706, AI017010, D80611, D80610, D79660, Z78342, C21502, AA428166, AA446595, AA452707, AA718983, AA722005, AA861846, AI025497, AI051843, Z24971, Z28673, Z40541, Z44707
843080	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 4434 of SEQ ID NO:762, b is an integer of 15 to 4448, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:762, and where b is greater than or equal to a + 14.	
843237	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2876 of SEQ ID NO:763, b is an integer of 15 to 2890, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID	

	NO:763, and where b is greater than or equal to a +	
	14.	
843381	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1689 of SEQ ID NO:764. b is an integer of 15 to 1703, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:764, and where b is greater than or equal to a +	
	14.	
843718	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	248 of SEQ ID NO:765. b is an integer of 15 to	
	262, where both a and b correspond to the positions	
	of nucleotide residues shown in SEQ ID NO:765.	
0.43003	and where b is greater than or equal to a + 14.	
843823	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	3058 of SEQ ID NO:766, b is an integer of 15 to	
	3072. where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID NO:766, and where b is greater than or equal to a +	
	14.	
844056	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1307 of SEQ ID NO:767, b is an integer of 15 to	
	1321, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:767, and where b is greater than or equal to a +	
	14.	
844325	1	H13033, H19108, W17353
	one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	1518 of SEQ ID NO:768, b is an integer of 15 to	
	1532, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:768, and where b is greater than or equal to a +	
844344	Preferably evaluded from the present invention are	
044344	Preferably excluded from the present invention are one or more polynucleotides comprising a	
	nucleotide sequence described by the general	
	formula of a-b, where a is any integer between 1 to	
	2555 of SEQ ID NO:769, b is an integer of 15 to	
	2569, where both a and b correspond to the	
	positions of nucleotide residues shown in SEQ ID	
	NO:769, and where b is greater than or equal to a +	
	14.	
844368	Preferably excluded from the present invention are	
	one or more polynucleotides comprising a	

844408	nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1623 of SEQ ID NO:770, b is an integer of 15 to 1637, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:770, and where b is greater than or equal to a + 14. Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 2471 of SEQ ID NO:771, b is an integer of 15 to 2485, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:771, and where b is greater than or equal to a + 14.	R25739. R25848. R26585, R26669, R38347. R43382. R43382. R82340, R82389. H22162. H22213. H86274, H86550. H86638. N48320. N49046. N73714. AA019818. AA122109, AA152348. AA152349, AA158712, H86273. AA595813. AA612911, AA995417. C04219. AA018291, AA442061. AA442163. AA724417. AA923788. T03807. A1038239. A1051425. Z39949. F03166.
844508	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 418 of SEQ ID NO:772, b is an integer of 15 to 432, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:772, and where b is greater than or equal to a + 14.	F06863, F06899, F10884 AA043997
844867	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1034 of SEQ ID NO:773, b is an integer of 15 to 1048, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:773, and where b is greater than or equal to a + 114.	R23270, R24465, H26326, N67923, AA181941, AA187906, AA687695, AA740438, AA879229, D81116, D81140
845000	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1005 of SEQ ID NO:774, b is an integer of 15 to 1019, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:774, and where b is greater than or equal to a + 14.	R22590, H92298, W04657, W31581, W37780, W39080
845281	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 2234 of SEQ ID NO:775, b is an integer of 15 to 2248, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:775, and where b is greater than or equal to a + 14.	T92139, T93566, T94885, T94933, R15017, R17377, R25556, R25791, R26489, R26511, R46713, R46790, R53266, R41457, R46790, R46713, R95961, R95995, R96764, R97692, H56545, H89870, H89871, H89871, N22103, N39443, N45521, N48555, N67524, N67561, N75299, N75567, N75882, W04741, W05590, W57992, W58076, AA001138, AA001282, AA001943, AA001919, AA027274, AA029603, AA082792,

AA102442. AA101	126, AA150932,
AA150901, AA176	661, AA176888.
AA223622, AA461	513, AA177059.
AA229768, AA230	089 AA493436
AA516126. AA528	
AA583433, AA610	
AA665090, AA744	
AA770662. AA829	
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AA864190. AA878	• 1
AA932042, AA933	
AA973926. AA977	
AA992503, AA995	· ·
A1094769, D82171	
W25970, W28703,	
C04813, C05281, A	
AA650341. AA651	636. AA452618.
AA453239. AA626	
AA679935. AA722	
AA846222. AA890	
AA992606. A10340)36. Al056096,
T16991, T23523. T	19071. F01728.
F02334. F05468. F	06081, F04719,
F08503	
845288 Preferably excluded from the present invention are	
one or more polynucleotides comprising a	
nucleotide sequence described by the general	
formula of a-b, where a is any integer between 1 to	
1591 of SEQ ID NO:776, b is an integer of 15 to	
1605, where both a and b correspond to the	
positions of nucleotide residues shown in SEQ ID	
NO:776, and where b is greater than or equal to a +	
14.	
845750 Preferably excluded from the present invention are T54633, T54715, T	59162, T59200.
one or more polynucleotides comprising a T65736, T65810, R	- 1
nucleotide sequence described by the general H71816, H71817, I	
formula of a-b, where a is any integer between 1 to H93320, H93493.	
1794 of SEQ ID NO:777, b is an integer of 15 to N79774, N93610, N	
1808, where both a and b correspond to the W25098, W25505,	
positions of nucleotide residues shown in SEQ ID W80977, W81080,	
NO:777, and where b is greater than or equal to a + AA010658, AA024	
14. AA053380, AA053	
AA196637, AA196	. 1
AA190037, AA190 AA234295, AA262	
k '	
AA425492, AA551	
AA614604, AA617	
AA570121, AA568	
AA983567, AI0156	
N87765, C02759, C	
C05299, C05572, A	1
AA290679, AA402	
AA411366, AA411	
AA411547, AA481	
AI032553. AI03876	31. A107/405.
AI032553. AI03876 AI088638, T16907	
	T16906,
A1088638, T16907,	T16906, 02456, F02921,

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	one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b. where a is any integer between 1 to 1470 of SEQ ID NO:778, b is an integer of 15 to 1484, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:778, and where b is greater than or equal to a +	
846077	Preferably excluded from the present invention are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 to 1329 of SEQ ID NO:779, b is an integer of 15 to	
	1343, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:779, and where b is greater than or equal to a +	

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Polynucleotide and Polypeptide Variants

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The present invention is directed to variants of the polynucleotide sequence disclosed in SEQ ID NO:X or the complementary strand thereto, and/or the cDNA sequence contained in a cDNA clone contained in the deposit.

The present invention also encompasses variants of the prostate and prostate cancer polypeptide sequence disclosed in SEQ ID NO:Y, a polypeptide sequence encoded by the polynucleotide sequence in SEQ ID NO:X, and/or a polypeptide sequence encoded by the cDNA in the related cDNA clone contained in the deposit.

"Variant" refers to a polynucleotide or polypeptide differing from the polynucleotide or polypeptide of the present invention, but retaining essential properties thereof. Generally, variants are overall closely similar, and, in many regions, identical to the polynucleotide or polypeptide of the present invention.

The present invention is also directed to nucleic acid molecules which comprise, or alternatively consist of, a nucleotide sequence which is at least 80%, 85%, 90%, 95%, 96%, 97%, 98%, 99% or 100%, identical to, for example, the nucleotide coding sequence in SEQ ID NO:X or the complementary strand thereto, the nucleotide coding sequence of the related cDNA contained in a deposited library or the complementary strand thereto, a nucleotide sequence encoding the polypeptide of SEQ ID NO:Y, a nucleotide sequence encoding a polypeptide sequence encoded by the nucleotide sequence in SEQ ID NO:X, a nucleotide sequence encoding the polypeptide encoded by the cDNA in the related cDNA contained in a deposited library, and/or polynucleotide fragments of any of these nucleic acid molecules (e.g., those fragments described herein). Polypeptides encoded by these nucleic acid molecules are also encompassed by the invention. In another embodiment, the invention encompasses nucleic acid molecules which comprise or alternatively consist of, a polynucleotide which hybridizes under stringent hybridization conditions, or alternatively, under low stringency conditions, to the nucleotide coding sequence in SEQ ID NO:X, the nucleotide coding sequence of the related cDNA clone contained in a deposited library, a nucleotide sequence encoding the polypeptide of SEQ ID NO:Y, a nucleotide sequence encoding a polypeptide sequence encoded by the nucleotide sequence in SEO ID NO:X, a nucleotide sequence encoding the polypeptide encoded by the cDNA in the related cDNA clone contained in a deposited library, and/or polynucleotide fragments of any of these nucleic acid molecules (e.g., those fragments described herein). Polynucleotides which

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hybridize to the complement of these nucleic acid molecules under stringent hybridization conditions or alternatively, under lower stringency conditions, are also encompassed by the invention, as are polypeptides encoded by these polynucleotides.

The present invention is also directed to polypeptides which comprise, or alternatively consist of, an amino acid sequence which is at least 80%, 85%, 90%, 95%, 96%, 97%, 98%, 99% or 100% identical to, for example, the polypeptide sequence shown in SEQ ID NO:Y, a polypeptide sequence encoded by the nucleotide sequence in SEQ ID NO:X, a polypeptide sequence encoded by the cDNA in the related cDNA clone contained in a deposited library, and/or polypeptide fragments of any of these polypeptides (e.g., those fragments described herein). Polynucleotides which hybridize to the complement of the nucleic acid molecules encoding these polypeptides under stringent hybridization conditions, or alternatively, under lower stringency conditions, are also encompassed by the invention, as are polypeptides encoded by these polynucleotides.

By a nucleic acid having a nucleotide sequence at least, for example, 95% "identical" to a reference nucleotide sequence of the present invention, it is intended that the nucleotide sequence of the nucleic acid is identical to the reference sequence except that the nucleotide sequence may include up to five point mutations per each 100 nucleotides of the reference nucleotide sequence encoding the polypeptide. In other words, to obtain a nucleic acid having a nucleotide sequence at least 95% identical to a reference nucleotide sequence, up to 5% of the nucleotides in the reference sequence may be deleted or substituted with another nucleotide, or a number of nucleotides up to 5% of the total nucleotides in the reference sequence may be inserted into the reference sequence. The query sequence may be, for example, an entire sequence referred to in Table 1, an ORF (open reading frame), or any fragment specified as described herein.

As a practical matter, whether any particular nucleic acid molecule or polypeptide is at least 80%, 85%, 90%, 95%, 96%, 97%, 98% or 99% identical to a nucleotide sequence of the present invention can be determined conventionally using known computer programs. A preferred method for determining the best overall match between a query sequence (a sequence of the present invention) and a subject sequence, also referred to as a global sequence alignment, can be determined using the FASTDB computer program based on the algorithm of Brutlag et al. (Comp. App. Biosci. 6:237-245 (1990)). In a sequence alignment the query and subject sequences are both DNA sequences. An RNA sequence can be

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compared by converting U's to T's. The result of said global sequence alignment is in percent identity. Preferred parameters used in a FASTDB alignment of DNA sequences to calculate percent identity are: Matrix=Unitary, k-tuple=4. Mismatch Penalty=1, Joining Penalty=30. Randomization Group Length=0. Cutoff Score=1. Gap Penalty=5. Gap Size Penalty 0.05. Window Size=500 or the length of the subject nucleotide sequence, whichever is shorter.

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If the subject sequence is shorter than the query sequence because of 5' or 3' deletions, not because of internal deletions, a manual correction must be made to the results. This is because the FASTDB program does not account for 5' and 3' truncations of the subject sequence when calculating percent identity. For subject sequences truncated at the 5' or 3' ends, relative to the query sequence, the percent identity is corrected by calculating the number of bases of the query sequence that are 5' and 3' of the subject sequence, which are not matched/aligned, as a percent of the total bases of the query sequence. Whether a nucleotide is matched/aligned is determined by results of the FASTDB sequence alignment. This percentage is then subtracted from the percent identity, calculated by the above FASTDB program using the specified parameters, to arrive at a final percent identity score. This corrected score is what is used for the purposes of the present invention. Only bases outside the 5' and 3' bases of the subject sequence, as displayed by the FASTDB alignment, which are not matched/aligned with the query sequence, are calculated for the purposes of manually adjusting the percent identity score.

For example, a 90 base subject sequence is aligned to a 100 base query sequence to determine percent identity. The deletions occur at the 5' end of the subject sequence and therefore, the FASTDB alignment does not show a matched/alignment of the first 10 bases at 5' end. The 10 unpaired bases represent 10% of the sequence (number of bases at the 5' and 3' ends not matched/total number of bases in the query sequence) so 10% is subtracted from the percent identity score calculated by the FASTDB program. If the remaining 90 bases were perfectly matched the final percent identity would be 90%. In another example, a 90 base subject sequence is compared with a 100 base query sequence. This time the deletions are internal deletions so that there are no bases on the 5' or 3' of the subject sequence which are not matched/aligned with the query. In this case the percent identity calculated by FASTDB is not manually corrected. Once again, only bases 5' and 3' of the subject sequence which are not matched/aligned with the query sequence are manually corrected for. No other

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manual corrections are to made for the purposes of the present invention.

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By a polypeptide having an amino acid sequence at least, for example, 95% "identical" to a query amino acid sequence of the present invention, it is intended that the amino acid sequence of the subject polypeptide is identical to the query sequence except that the subject polypeptide sequence may include up to five amino acid alterations per each 100 amino acids of the query amino acid sequence. In other words, to obtain a polypeptide having an amino acid sequence at least 95% identical to a query amino acid sequence, up to 5% of the amino acid residues in the subject sequence may be inserted, deleted, (indels) or substituted with another amino acid. These alterations of the reference sequence may occur at the amino or carboxy terminal positions of the reference amino acid sequence or anywhere between those terminal positions, interspersed either individually among residues in the reference sequence or in one or more contiguous groups within the reference sequence.

As a practical matter, whether any particular polypeptide is at least 80%, 85%, 90%, 95%, 96%, 97%, 98% or 99% identical to, for instance, the amino acid sequence in SEQ ID NO:Y or a fragment thereof, the amino acid sequence encoded by the nucleotide sequence in SEQ ID NO:X or a fragment thereof, or the amino acid sequence encoded by the cDNA in the related cDNA clone contained in a deposited library, or a fragment thereof, can be determined conventionally using known computer programs. A preferred method for determing the best overall match between a query sequence (a sequence of the present invention) and a subject sequence, also referred to as a global sequence alignment, can be determined using the FASTDB computer program based on the algorithm of Brutlag et al. (Comp. App. Biosci.6:237- 245(1990)). In a sequence alignment the query and subject sequences are either both nucleotide sequences or both amino acid sequences. The result of said global sequence alignment is in percent identity. Preferred parameters used in a FASTDB amino acid alignment are: Matrix=PAM 0, k-tuple=2, Mismatch Penalty=1, Joining Penalty=20, Randomization Group Length=0, Cutoff Score=1, Window Size=sequence length, Gap Penalty=5, Gap Size Penalty=0.05, Window Size=500 or the length of the subject amino acid sequence, whichever is shorter.

If the subject sequence is shorter than the query sequence due to N- or C-terminal deletions, not because of internal deletions, a manual correction must be made to the results. This is because the FASTDB program does not account for N- and C-terminal truncations of the subject sequence when calculating global percent identity. For subject sequences